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NORTH BRITISH REVIEW

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THE



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NOVEMBER, 1854.

- ART. I.—1. *A Popular History of British Zoophytes or Coralines.* By the Rev. D. LANDSBOROUGH, D.D., A.L.S., &c., &c. London, 1852.
2. *A Popular History of British Sea-weeds, comprising their Structure, Fructification, Specific Characters, Arrangement, and General Distribution, with Notices of some of the Fresh-water Algae.* By the Rev. D. LANDSBOROUGH, A.L.S., &c., &c. Lond 1851.
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6. *Things of the Sea Coast.* By ANN PRATT. (Society for Promoting Christian Knowledge.) London, 1850.

THE study of Natural History has become now-a-days an honourable one; and the successful investigator of the minutest animals takes his place unquestioned among the men of genius, and, like the philosopher of old Greece, is considered, by virtue of his science, fit company for dukes and princes. Nay, the study is now more than honourable; it is even fashionable. Thanks to the works which head this Article, and to innumerable others on kindred branches of science which have appeared of late, every well-educated person is bound to know somewhat, at least, of the wondrous organic forms which surround him in every sunbeam and every pebble; and if Mr. Gosse's presages be correct, a few years more will see every clever young lady with her "aquarium," and live sea-anemones and algae will supplant "crochet" and Berlin wool. Happy consummation—when women's imagination shall be content with admiring Nature's real beauties, instead of concealing their own idleness

to the injury of poor starving needlewomen, by creating ghastly and unartistic caricatures of them.

The books which head our Article have been chosen out of very many, not because they are the only good ones, but because they are the best with which we are acquainted. Of them, perhaps, the best for a beginner is Professor Harvey's "Seaside Pook," of which we cannot speak too highly; and most pleasant is it to see a man of genius and learning thus gathering the bloom of all his varied knowledge, to put it into a form as well suited for a child as for a savant. We never, perhaps, met with a book in which so vast a quantity of facts had been compressed into so small a space, and yet told so gracefully, simply, without a taint of pedantry or cumbrousness. Miss Pratt's "Things of the Sea Coast" is very good also, especially for younger children. And what Mr. Gosse's works will be like, all may judge who know his "Beasts, Birds, Reptiles, and Fishes," the best and cheapest manual of zoology which as yet exists; and his two delightful books, "The Canadian Naturalist," and the "Tour in Jamaica," in which he has done for the American forests, and the West India islands, what White did for his Selbourne, dear old Bartram the Quaker for Florida, and Darwin for the Pacific, namely, brought before us not merely the names of flowers and animals, but their living ways and works, and the scenery in which they dwell, so as to carry the reader away in imagination to the place itself, as if by some ever-shifting diorama, at once exciting and satisfying the thirst for foreign travel.

* Dr. Landsborough's two little books are excellent manuals, with well-drawn and coloured plates, for the comfort of those to whom a scientific nomenclature (as liable itself to be faulty and obscure, as every other human thing) conveys but a vague conception of the objects, and may serve, for the beginner, as good and cheap preparations for Professor Harvey's greater work on the sea-weeds, and for the new edition of Professor Johnston's invaluable "British Zoophytes." And it is with great pleasure that we watch these books, and many other excellent ones on other branches of Natural History, finding their way more and more into drawing-rooms and school-rooms, and exciting daily greater thirst for a knowledge which, even twenty years ago, was considered superfluous for all but the professional student.

* Since those pages were written, we have had to deplore the death of this pious and learned man, from cholera, at Salteats, the scene of his ministry. He knows now, we doubt not, the true meaning of many a wonder which he once saw only "through a glass darkly," but now face to face, in the light of Him who created them.

What a change from the temper of two generations since, when the naturalist was looked on as a harmless enthusiast, who went "bug-hunting," simply because he had not spirit to follow a fox. There are those now alive who can recollect an amiable man being literally bullied out of the New Forest, because he dared to make a collection (now, we believe, in some unknown abyss of that great *Avernus*, the British Museum) of fossil shells from those very Hordle Cliffs, for exploring which there is now established a society of subscribers and correspondents. They can remember, too, when, on the first appearance of Bewick's "*British Birds*," the excellent sportsman who brought it down to the forest, was asked, Why on earth he had bought a book about "cock-sparrows?" and had to justify himself again and again, simply by lending the book to his brother sportsmen, to convince them that there were rather more than a dozen sorts of birds (as they then held) indigenous to Hampshire. But the book, perhaps, which turned the tide in favour of Natural History, among the higher classes at least, in the south of England, was White's "*History of Selbourne*." A Hampshire gentleman and sportsman, whom everybody knew, had taken the trouble to write a book about the birds and the weeds in his own parish, and the everyday-things which went on under his eyes, and everyone else's. And all gentlemen, from the Weald of Kent to the Vale of Blackmoor, shrugged their shoulders mysteriously, and said, "Poor fellow!" till they opened the book itself, and discovered to their surprise that it read like any novel. And then came a burst of confused, but honest admiration; from the young squire's "Bless me! who would have thought that there were so many wonderful things to be seen in one's own park!" to the old squire's more morally valuable "Bless me! why I have seen that and that a hundred times, and never thought till now how wonderful they were!"

There were great excuses, though, of old, for the contempt in which the naturalist was held; great excuses for the pitying tone of banter with which the Spectator talks of "the ingenious" Don Saltero, (as no doubt the Neapolitan gentlemen talked of Ferrante Imperato the apothecary, and his museum;) great excuses for Voltaire, when he classes the collection of butterflies among the other "*bigarrures de l'esprit humain*." For, in the last generation, the needs of the world were different. It had no time for butterflies and fossils. While Buonaparte was hovering on the Boulogne coast, the pursuits and the education which were needed were such as would raise up men to fight him; and the coarse, fierce, hardhanded training of our grandfathers came when it was wanted, and did the work which was

required of it, else we had not been here now. Let us be thankful that we have had leisure for science; and shew now in war that our science has at least not unmanned us.

Moreover, Natural History, if not fifty years ago, certainly a hundred years ago, was hardly worthy of men of practical common sense. After, indeed, Linné, by his invention of generic and specific names, had made classification possible, and by his own enormous labours had shewn how much could be done when once a method was established, the science has grown rapidly enough. But before him little or nothing had been put into form definite enough to allure those who (as the many always will) prefer to profit by others' discoveries, than to discover for themselves; and Natural History was attractive only to a few earnest seekers, who found too much trouble in disencumbering their own minds of the dreams of bygone generations, whether facts, like cockatrices, basilisks, and krakens, the breeding of bees out of a dead ox, and of geese from barnacles, or theories, like those of the four elements, the *vis plastica* in Nature, animal spirits, and the other musty heirlooms of Aristotelism and Neo-platonism, to try to make a science popular, which as yet was not even a science at all. Honour to them, nevertheless. Honour to Ray and his illustrious contemporaries in Holland and France. Honour to Seba and Aldrovandus; to Pomet, with his "Historie of Drugges;" even to the ingenious Don Saltero, and his tavern-museum in Cheyne Walk. Where all was chaos, every man was useful who could contribute a single spot of organized standing ground in the shape of a fact or a specimen. But it is a question whether Natural History would have ever attained its present honours, had not Geology arisen, to connect every other branch of Natural History with problems as vast and awful as they are captivating to the imagination. Nay, the very opposition with which Geology met was of as great benefit to the sister sciences as to itself. For, when questions belonging to the most sacred hereditary beliefs of Christendom were supposed to be affected by the verification of a fossil shell, or the proving that the Maestricht "*homo diluvii testis*" was, after all, a monstrous cft, it became necessary to work upon Conchology, Botany, and Comparative Anatomy, with a care and a reverence, a caution and a severe induction, which had been never before applied to them; and thus gradually, in the last half century, the whole quire of cosmical sciences have acquired a soundness, severity, and fulness, which render them, as mere intellectual exercises, as valuable to a manly mind as Mathematics and Metaphysics.

And how very lately have they attained that firm and honourable standing ground! It is a question, whether, even twenty

years ago, Geology, as it then stood, was worth troubling one's head about, so little had been really proved. And heavy and uphill was the work, even within the last fifteen years, of those who steadfastly set themselves to the task of proving, and of asserting at all risks, that the Maker of the coal seam and the diluvial cave could not be a "Deus quidam deceptor," and that the facts which the rock and the silt revealed were sacred, not to be warped or trifled with, for the sake of any cowardly and hasty notion that they contradicted His other messages. When a few more years are past, Buckland and Sedgwick, Lyell and Jameson, and the group of brave men who accompanied and followed them, will be looked back to as moral benefactors to their race, and almost as martyrs, also, when it is remembered how much misunderstanding, obloquy, and plausible folly they had to endure from well-meaning fanatics like Fairholme or Granville Penn, and the respectable mob at their heels, who tried (as is the fashion in such cases) to make a hollow compromise between fact and the Bible, by twisting facts just enough to make them fit the fancied meaning of the Bible, and the Bible just enough to make them fit the fancied meaning of the facts. But there were a few who would have no compromise; who laboured on with a noble recklessness, determined to speak the thing which they had seen, and neither more nor less, sure that God could take better care than they of His own everlasting truth; and now they have conquered; and the facts which were twenty years ago denounced as contrary to Revelation, are now accepted not merely as consonant with, but as corroborative thereof; and sound practical geologists, like Hugh Miller, in his "Footprints of the Creator," and Professor Sedgwick, in the invaluable notes to his "Discourse on the Studies of Cambridge," are wielding in defence of Christianity the very science which was faithlessly and cowardly expected to subvert it.

But of all the branches of cosmic science which owe a debt to geology, marine zoology and botany owe most; and the tiny zoophytes and microscopic animalcules which people every shore and every drop of water, have been now raised to a rank in the human mind, more important, perhaps, than even those gigantic monsters, whose models fill the lake at the New Crystal Palace. The research which has been bestowed, for the last century, upon these once unnoticed atomies, has well repaid itself; for from no branch of physical science has more been learnt of the *scientia scientiarum*, the priceless art of learning; no branch of science has more utterly confounded the wisdom of the wise, shattered to pieces systems and theories, and the idolatry of arbitrary names, and taught man to be silent while his Maker speaks, than this apparent pedantry of zoophytology, in which our old distinctions of "animal," "vegetable," and

"mineral" are trembling in the balance, seemingly ready to vanish like their fellows, "the four elements," of fire, air, earth, and water. No branch of science has helped so much to sweep away that sensuous idolatry of mere size, which tempts man to admire and respect objects in proportion to the number of feet or inches which they occupy in space. And no branch, moreover, has been more humbling to the boasted rapidity and omnipotence of the human reason, and taught those who have eyes to see, and hearts to understand, how weak and wayward, staggering and slow, are the steps of our fallen race (rapid and triumphant enough in that broad road of theories which leads to intellectual destruction) whenever they tread the narrow path of true science, which leads (if we may be allowed to transfer our Lord's great parable from moral to intellectual matters) to life; to the living and permanent knowledge of living things, and the laws of their existence. Humbling, truly, to one who, in this summer of 1854, the centenary year of British zoophytology, looks back to the summer of 1754, when good Mr. Ellis, the wise and benevolent West Indian merchant, read before the Royal Society his famous paper proving the animal nature of corals, and followed it up the year after by that famous "Essay toward a Natural History of the Corallines, and other like marine productions of the British coasts," which forms the groundwork of all our knowledge on the subject to this day. The chapter in Dr. G. Johnston's *British Zoophytes*, p. 407, or the excellent little résumé thereof in Dr. Landsborough's book on the same subject, is really a saddening one, as one sees how loth were not merely dreamers like Maisigli or Bonnet, but sound-headed men like Pallas and Linné, to give up the old sense-bound fancy, that these corals were vegetables, and their polypes some sort of living flowers. Yet after all there are excuses for them. Without our improved microscopes, and while the sciences of comparative anatomy and chemistry were yet infantile, it was difficult to believe what was the truth; and for this simple reason that, as usual, the truth, when discovered, turned out far more startling and prodigious than the dreams which men had hastily substituted for it; more strange than Ovid's old story that the coral was soft under the sea, and hardened by exposure to air; than Maisigli's notion, that the coral-polypes were its flowers; than Dr. Parsons' contemptuous denial, that these complicated forms could be "the operations of little, poor, helpless, jelly-like animals, and not the work of more sure vegetation;" than Baker the microscopist's detailed theory of their being produced by the crystallization of the mineral salts in the sea-water, just as he had seen "the particles of mercury and copper in aquafortis assume tree-like forms, or curious delineations of mosses and

minute shrubs on slates and stones, owing to the shooting of salts intermixed with mineral particles :”— one smiles at it now, yet these men were no less sensible than we of the year 1854, and if we know better, it is only because other men, and those few and far between, have laboured amid disbelief, ridicule, and error, having again and again to retrace their steps, and to unlearn more than they learnt, seeming to go backwards when they were really progressing most ; and we have entered into their labours, and find them, as we have just said, more wondrous than all the poetic dreams of a Bonnet or a Darwin. For who, after all, to take a few broad instances, (not to enlarge on the great root-wonder of a number of distinct individuals connected by a common life, and forming a seeming plant invariable in each species,) would have dreamed of the “bizareries” which these very zoophytes present in their classification ? You go down to Leith shore after a gale of wind, and pick up a few of those delicate little sea-furms. You have two in your hand, which probably look to you, even under a good pocket magnifier, identical, or nearly so *. You are told to your surprise, that however like the dead horny polypidoms which you hold may be, the two species of animal which have formed them are at least as far apart in the scale of creation as a quadruped is from a fish. You see in some Musselburgh dredger’s boat the phosphorescent sea-pen, (unknown in England,) a living feather, of the look and consistency of a cock’s comb ; or the still stranger sea-rush, (*Vulgaria mirabilis*), a spine two feet long, with hundreds of rosy flowerets arranged in half-rings round it from end to end ; and you are told that these are the congeners of the great stony Venus’s fan which hangs in seamen’s cottages, brought home from the West Indies. And ere you have done wondering, you hear that all three are congeners of the ugly shapeless white “dead man’s hand,” which you may pick up after a storm on any shore. You have a beautiful madrepora or brainstone on your mantelpiece, brought home from some Pacific coral-reef. You are to believe that it has no more to do with the beautiful tubular corals among which it was growing, than a bird has with a worm, and that its first cousins are the soft slimy sea-anemones, which you see expanding their living flowers in every pool at the back of Musselburgh pier, bags of sea-water, without a trace of bone or stone. You must believe it ; for in science, as in higher matters, he who will walk surely, must “walk by faith and not by sight.”

These are but a few of the wonders which the classification of marine animals affords ; and only drawn from one class of them.

* *Sertularia ovata*, and *Gonolatria formosa*, or any of the small *Sertularia*, compared with *Cyanea* and *Cellularia*, are very good examples.

though almost as common among every other family of that submarine world whereof Spenser sang—

“ Oh, what an endless work have I in hand
 To count the sea’s abundant progeny !
 Whose fruitful seed far passeth those in land,
 And also those which won in th’ azure sky.
 For much more eath to tell the stars on high,
 Albe they endless seem in estimation,
 Than to recount the sea’s posterity ;
 So fertile be the floods in generation,
 So huge their numbers, and so numberless their *nation*.”

But these few examples will be sufficient to account both for the slow pace at which the knowledge of sea-animals has progressed, and for the allurements which men of the highest attainments have found, and still find in it. And when to this we add the marvels which meet us at every step in the anatomy and the reproduction of these creatures, and in the chemical and mechanical functions which they fulfil in the great economy of our planet, we cannot wonder at finding that the books at the head of our article carry with them a certain charm of romance, and feed the play of fancy, and that love of the marvellous which is inherent in man, at the same time that they lead the reader to more solemn and lofty trains of thought, which can find their full satisfaction only in self-forgetful worship, and that hymn of praise which goes up ever from land and sea, as well as from saints and martyrs and the heavenly host, “ Oh, all ye works of the Lord, and ye, too, spirits and souls of the righteous, praise Him, and magnify Him for ever !”

We have said, that there were excuses for the old contempt for the study of Natural History. We have said too, it may be hoped, enough to shew that contempt to have been ill-founded, at least as far as regards its effect on the feelings and the intellect. But still, there are those who regard it as a mere amusement, and that at best as an effeminate one, and think that it can at best help to while away a leisure hour harmlessly, and perhaps usefully, as a substitute for coarser sports, or the reading of novels. Those, however, who have followed it out, especially on the sea-shore, know better, and can tell from experience, that over and above its accessory charms of pure sea-breezes, and wild rambles by cliff and loch, the study itself has had a weighty moral effect upon their hearts and spirits. There are those who can well understand how the good and wise John Ellis, amid all his philanthropic labours for the good of the West Indies, while he was spending his intellect and fortune in introducing into our tropic settlements the bread fruit and mangosteen, and every plant and seed which he hoped might be useful for medicine, agriculture, and commerce, could

yet feel himself justified in devoting large portions of his ever well-spent time to the fighting the battle of the corallines against Parsons and the rest, and even measuring pens with Linné, the prince of naturalists. There are those who can sympathize with the gallant old Scotch officer mentioned by some writer on sea-weeds, who, desperately wounded in the breach at Badajos, and a sharer in all the toils and triumphs of the Peninsular war, could in his old age shew a rare sea-weed with as much triumph as his well-earned medals, and talk over a tiny spore-capsule with as much zest as the records of sieges and battles. Why not? That temper which made him a good soldier may very well have made him a good naturalist also. And certainly, the best naturalist, as far as logical acumen, as well as earnest research, is concerned, whom England has ever seen, was the Devonshire squire, Colonel George Montagu, of whom Mr. E. Forbes well says, that "had he been educated a physiologist," (and not, as he was, a soldier and a sportsman,) "and made the study of nature his aim and not his amusement, his would have been one of the greatest names in the whole range of British science." We question, nevertheless, whether he would have not lost more than he would have gained by a different training. It might have made him a more learned systematizer; but would it have quickened in him that "seeing eye" of the true soldier and sportsman, which makes Montagu's descriptions indelible word-pictures, instinct with life and truth? "There is no question," says Professor E. Forbes, after bewailing the vagueness of most naturalists, "about the identity of any animal Montagu described. . . . He was a forward-looking philosopher; he spoke of every creature as if one exceeding like it, yet different from it, would be washed up by the waves next tide. Consequently his descriptions are permanent." Scientific men will recognise in this the highest praise which can be bestowed, because it attributes to him that highest faculty—the *Art of Seeing*; but the study and the book would not have given that. It is God's gift, wheresoever educated: but its true schoolroom is the camp and the ocean, the prairie and the forest; active self-helping life, which can grapple with nature herself: not merely with printed books about her. Let no one think that this same natural history is a pursuit fitted only for effeminate or pedantic men. We should say rather, that the qualifications required for a perfect naturalist are as many and as lofty as were required, by old chivalrous writers, for the perfect knight-errant of the middle ages; for (to sketch an ideal, of which we are happy to say our race now affords many a fair realization) our perfect naturalist should be strong in body, able to haul a dredge, climb a rock, turn a boulder, walk all day, uncertain where he shall eat or

rest; able to face sun and rain, wind and frost, and to eat and drink thankfully anything, however coarse or meagre; he should know how to swim for his life, to pull an oar, sail a boat, and ride the first horse which comes to hand; and, finally, he should be a thoroughly good shot, and a skilful fisherman; and if he go far abroad, be able on occasion to fight for his life.

For his moral character, he must, like a knight of old, be first of all gentle and courteous, ready and able to ingratiate himself with the poor, the ignorant, and the savage; not only because foreign travel will be often otherwise impossible, but because he knows how much invaluable local information can be only obtained from fishermen, miners, and tillers of the soil. Next, he should be brave and enterprising, and withal patient and undaunted, not merely in travel, but in investigation, knowing (as Lord Bacon might have put it) that the kingdom of nature, like the kingdom of heaven, must be taken by violence, and that only to those who knock long and earnestly, does the great mother open the doors of her sanctuary. He must be of a reverent turn of mind also, not rashly discrediting any reports, however vague and fragmentary; giving man credit always for some germ of truth, and giving nature credit for an inexhaustible fertility and variety, which will keep him his life long always reverent, yet never superstitious; wondering at the commonest, but not surprised by the most strange; free from the idols of size and sensuous loveliness; able to see grandeur in the minutest objects, beauty in the most ungainly; estimating each thing not carnally, as the vulgar do, by its size or its pleasantness to the senses, but spiritually, by the amount of Divine thought revealed to him therein; holding every phenomenon worth the noting down; believing that every pebble holds a treasure, every bud a revelation; making it a point of conscience to pass over nothing through laziness or hastiness, lest the vision once offered and despised should be withdrawn, and looking at every object as if he were never to behold it again.

Moreover, he must keep himself free from all those perturbations of mind which not only weaken energy, but darken and confuse the inductive faculty; from haste and laziness, from melancholy, testiness, and pride, and all the passions which make men see only what they wish to see. Of solemn and scrupulous reverence for truth, of the habit of mind which regards each fact and discovery not as our own possession, but as the possession of its Creator, independent of us, our tastes, our needs, or our vain-glory, we hardly need to speak; for it is the very essence of a naturalist's faculty, the very tenure of his existence; and without truthfulness, science would be as impossible now as chivalry would have been of old.

And last, but not least, the perfect naturalist should have in him the very essence of true chivalry, namely, self-devotion; the desire to advance, not himself and his own fame or wealth, but knowledge and mankind. He should have this great virtue; and in spite of many shortcomings, (for what man is there who liveth and sinneth not?) naturalists as a class have it, to a degree which makes them stand out most honourably in the midst of a self-seeking and mammonite generation, inclined to value everything by its money price, its private utility. The spirit which gives freely, because it knows that it has received freely; which communicates knowledge without hope of reward, without jealousy and mean rivalry, to fellow-students and to the world; which is content to delve and toil comparatively unknown, that from its obscure and seemingly worthless results others may derive pleasure, and even build up great fortunes, and change the very face of cities and lands, by the practical use of some stray talisman which the poor student has invented in his laboratory;—this is the spirit which is abroad among our scientific men, to a greater degree than it ever has been among any body of men, for many a century past; and might well be copied by those who profess deeper purposes and a more exalted calling, than the discovery of a new zoophyte, or the classification of a moorland crag.

And it is these qualities, however imperfectly they may be realized in any individual instance, which make our scientific men, as a class, the wholesomest and pleasantest of companions abroad, and at home the most blameless, simple, and cheerful, in all domestic relations; men for the most part, of manful heads, and yet of child-like hearts, turning to quiet study, in these late piping times of peace, an intellectual health and courage, which might have made them, in more fierce and troublous times, capable of doing good service with very different instruments than the scalpel and the microscope.

We have been sketching an ideal: but one which we seriously recommend to the consideration of all parents; for, though it be impossible, and absurd to wish, that every young man should grow up a naturalist by profession, yet this age offers no more wholesome training, both moral and intellectual, than that which is given by instilling into the young an early taste for out-door physical science. The education of our children is now more than ever a puzzling problem, if by education we mean the development of the whole humanity, not merely of some arbitrarily chosen part of it. How to feed the imagination with wholesome food, and teach it to despise French novels, and that sugared slough of sentimental poetry, in comparison with which the old fairy-tales and ballads were manful and rational; how to counteract the tendency to shallow and con-

ceited sciolism, engendered by hearing popular lectures on all manner of subjects, which can only be really learnt by stern methodic study; how to give habits of enterprise, patience, accurate observation, which the counting-house or the library will never bestow; above all, how to develop the physical powers, without engendering brutality and coarseness, are questions becoming daily more and more puzzling, while they need daily more and more to be solved, in an age of enterprise, travel, and emigration, like the present. For the truth must be told, that the great majority of men who are now distinguished by commercial success, have had a training the directly opposite to that which they are giving their sons. They are for the most part men who have migrated from the country to the town, and had in their youth all the advantages of a sturdy and manful hill-side or sea-side training, whose bodies were developed, and their lungs fed on pure breezes, long before they brought to work in the city the bodily and mental strength which they had gained by loch and moor. But it is not so with their sons. Their business habits are learnt in the counting-house; a good school, doubtless, as far as it goes: but one which will expand none but the lowest intellectual faculties; which will make them accurate accountants, shrewd computers, but never the originators of daring schemes, men able and willing to go forth to replenish the earth and subdue it. And in the hours of relaxation, how much of their time is thrown away for want of anything better, on frivolity, not to say secret profligacy, parents know too well; and often shut their eyes in very despair to evils which they know not how to cure. A frightful majority of our middle class young men are growing up effeminate, empty of all knowledge but what tends directly to the making of a fortune; or rather, to speak correctly, to the keeping up the fortunes which their fathers made for them; while of the minority, who are indeed thinking and reading men, how many women as well as men have we seen wearying their souls with study undirected, often misdirected study; craving to learn, yet not knowing how or what to learn; cultivating, with unwholesome energy, the head at the expense of body and of heart, catching up with the most capricious self-will one mania after another, and tossing it away again for some new phantom; gorging the memory with facts which no one has taught them to arrange, and the reason with problems which they have no method for solving, till they fret themselves into a chronic fever of the brain, which too often urges them on to plunge, as it were to cool the inward fire, into the ever restless sea of doubt and disbelief. It is a sad picture. There are many who may read these pages whose hearts will tell them that it is a true one. What is wanted in these cases is a methodic and scientific

habit of mind; and a class of objects on which to exercise that habit, which will fever neither the speculative intellect nor the moral sense; and that physical science will give, as nothing else can give it.

Moreover, to revert to another point which we touched just now, man has a body as well as a mind, and with the vast majority there will be no *mens sana* unless there be a *corpus sanum* for it to inhabit. And what outdoor training to give our youths, is, as we have already said, more than ever puzzling. This difficulty is felt, perhaps, less in Scotland than in England. The Scotch climate compels hardiness; the Scotch bodily strength makes it easy; and Scotland, with her mountain-tours in summer, and her frozen lochs in winter, her labyrinth of sea-shore, and, above all, that priceless boon which Providence has bestowed on her, in the contiguity of her great cities to the loveliest scenery, and hills where every breeze is health, affords facilities for healthy physical life unknown to the Englishman, who has no Arthur's Seat towering above his London, no Western Islands spotting the ocean firths beside his Manchester. Field sports, with the invaluable training which they give, if not

“The reason firm,”

Yet still

“The temperate will,
Endurance, foresight, strength, and skill,”

have become impossible for the greater number; and athletic exercises are now, in England at least, so artificialized, so expensive, so mixed up with drinking, gambling, and other evils of which we need say nothing here, that one cannot wonder at any parents' shrinking from allowing their sons to meddle much with them. And yet the young man who has had no substitute for such amusements, will cut but a sorry figure in Australia, Canada, or India, and if he stays at home, spend many a pound in doctors' bills, which could have been better employed elsewhere. “Taking a walk,”—as one would take a pill or a draught—seems likely soon to become the only form of outdoor existence possible for us of the British Isles. But a walk without an object, unless in the most lovely and novel of scenery, is a poor exercise, and as a recreation, utterly nil. We never knew two young lads go out for a “constitutional,” who did not, if they were commonplace youths, gossip the whole way about ‘things better left unspoken; if they were clever ones, fall an arguing and brainsbeating on politics or metaphysics, from the moment they left the door, and return with their wits even more heated and tired than they were when they set out. We cannot help fancying that Milton made a mistake in a certain celebrated passage, and that it was not “sitting on a hill apart,” but

tramping four miles out and four miles in along a turnpike road, that his hapless spirits discoursed

“Of fate, free-will, foreknowledge absolute,
And found no end, in wandering mazes lost.”

Seriously, if we wish rural walks to do our children any good, we must give them a love for rural sights, an object in every walk; we must teach them—and we can teach them—to find wonder in every insect, sublimity in every hedge-row, the records of past worlds in every pebble, and boundless fertility upon the barren shore; and so, by teaching them to make full use of that limited sphere in which they now are, make them faithful in a few things, that they may be fit hereafter to be rulers over much.

We may seem to exaggerate the advantages of such studies; but the question after all is one of experience; and we have had experience enough and to spare that what we say is true. We have seen the young man of fierce passions, and uncontrollable daring, expend healthily that energy which threatened daily to plunge him into recklessness, if not into sin, upon hunting out and collecting, through rock and bog, snow and tempest, every bird and egg of the neighbouring forest. We have seen the cultivated man, craving for travel and for success in life, pent up in the drudgery of London work, and yet keeping his spirit calm, and perhaps his morals all the more righteous, by spending over his microscope evenings which would too probably have gradually been wasted at the theatre. We have seen the young London beauty, amid all the excitement and temptation of luxury and flattery, with her heart pure and her mind occupied in a boudoir full of shells and fossils, flowers and sea-weeds, and keeping herself unspotted from the world, by considering the lilies of the field, how they grow. And therefore it is that we hail with thankfulness every fresh book of the kind, which we have mentioned at the head of this article, as a fresh boon to the young, a fresh help to those who have to educate them; and seldom pass those hapless loungers, who haunt every watering-place along our coasts, without thinking sadly how much more earnest, happier, and better, men and women they might be, if the veil were but lifted from their eyes, and they could learn to behold that glory of God, which is all around them like an atmosphere, while they, unconscious of what and where they are, wrapt up each in his little selfish world of vanity or interest, gaze lazily around them at earth, and sea, and sky,

“And have no speculation in those eyes,
Which they do glare withal.”

What such people do at watering-places is a matter of perennial wonder, or rather what they think of—for they do nothing;

and every wharf to them is but a "wharf of Lethe," by which they "rot dull as the oozy weed." A great deal of dressing, a lounge in the club-room, a stare out of the window with the telescope at some passing ship, an attempt to take a bad sketch, a saunter on the parade and piers, interminable reading of 'the silliest of novels, a purposeless fine weather sail in a yacht, probably accompanied by ineffectual attempts to catch a 'mackerel, and the consumption of many cigars, and at night a soulless *rechauffé* of second-rate town frivolity—this is the life-in-death in which thousands waste their summers.

But matters are mending, slowly, though surely, under the spread of popular scientific books; and we doubt not, that even at most aristocratic and select Torquay, a party of young people might be gathered, at a day's notice, who, by dint of Mr. Pengelly's "Lectures," and Harvey's "Sea-side Book," and Miss Pratt's "Things of the Sea Coast," are enough aware of what is to be seen, to leave the quay and the library, to follow, through wet and dry, on a day's excursion, a naturalist who will show it to them.

As we live on the spot, we can choose our season and our day, and start forth, on some glorious morning of one of our Italian winters, to see what last night's easterly gale has swept from the populous shallows of Torbay, and cast up, high and dry, on Paignton sands.

Torbay is a place which should be as much endeared to the naturalist as to the patriot and to the artist. We cannot gaze on its blue ring of water, and the great limestone bluffs which bound it to the north and south, without a glow passing through our hearts, as we remember the terrible and glorious pageant which past by in the bright July days of 1588, when the Spanish Armada ventured slowly past Berry Head, with Elizabeth's gallant pack of Devon captains (for the London fleet had not yet joined) following fast in its wake, and dashing into the midst of the vast line, undismayed by size and numbers, while their kin and friends stood watching and praying on the cliffs, spectators of Britain's Salamis. The white line of houses, too, on the other side of the bay, is Brixham, famed as the landing-place of William of Orange; and the stone on the pier-head, which marks his first footsteps on British ground, is sacred in the eyes of all true English Whigs; and close by stands the castle of the settler of Newfoundland, Sir Humphrey Gilbert, Raleigh's half-brother, most learned of all Elizabeth's admirals in life, most pious and heroic in death. And as for scenery, though it can boast of neither mountain peak or dark fiord, and would seem tame enough in the eyes of a western Scot or Irishman, yet Torbay surely has a soft beauty of its own, in the rounded hills which slope into the sea, spotted with parks full of

stately timber trees, with squares of emerald grass and rich red fallow field, each parted from the other by the long line of tall elms, just flushing green in the spring hedges, which run down to the very water's edge, their boughs unwarped by any blast, and here and there apple orchards, just bursting into flower in the spring sunshine, and narrow strips of water meadow, where the red cattle are already lounging knee-deep in richest grass, within ten yards of the rocky pebble beach, which six hours hence will be hurling columns of rosy foam high into the sunlight, and sprinkling passengers, and cattle, and trim gardens, which hardly know what frost and snow may be, but see the flowers of autumn meet the flowers of spring, and the old year linger smilingly to twine a garland for the new.

No wonder that such a spot as Torquay, with its delicious Italian climate, and endless variety of rich woodland, flowery lawn, fantastic rock-cavern, and broad bright tide-sand, sheltered from every wind of heaven except the soft south-east, should have become a favourite haunt, not only for invalids, but for naturalists. Indeed, it may well claim the honour of being the original home of marine zoology and botany in England, as the Frith of Forth, under the auspices of Sir John Dalzell, has been for Scotland. For here worked Montagu, Turton, and Mrs. Griffith, to whose masculine powers of research English marine botany almost owes its existence, and who still survives, at an age long beyond the natural term of man, to see, in her cheerful and honoured old age, that knowledge become popular and general, which she pursued for many a year unassisted and alone. And here too, now, Dr. Battersby possesses a collection of shells, inferior, perhaps, to hardly any in England. Torbay, moreover, from the variety of its rocks, aspects, and sea-floors, where limestones alternate with traps, and traps with slates, while at the valley-mouths the soft sandstones and hard conglomerates of the new red series slope down into the tepid and shallow waves, affords an abundance and variety of animal and vegetable life, unequalled, perhaps, in any other part of Great Britain. It cannot boast, certainly, of those strange deep-sea forms which Messrs. Alder, Goodsir Laskey, and Forbes, dredge among the lochs of the western Highlands, and the submarine mountain glens of the Zetland sea; but it has its own varieties, and its own ever fresh novelties, and in spite of all the search which has been lavished on its shores, a naturalist cannot now work there for a winter without discovering forms new to science, or meeting with curiosities which have escaped all observers, since the lynx eye of Montagu espied them full fifty years ago.

Follow us, then, reader, in imagination, out of the gay watering place, with its London shops and London equipages, along the broad road beneath the sunny limestone cliff, tufted with

golden furze, and past the huge oaks and green slopes of Tor Abbey, and the fantastic rocks of Livermead, scooped by the waves into a labyrinth of double and triple caves, like Hindoo temples, upborne on pillars banded with yellow and white and red, a week's study, in form and colour and chiaro-oscuro, for any artist; and a mile or so further along a pleasant road, with land-locked glimpses of the bay, to the broad sheet of sand which lies between the village of Paignton and the sea—sands trodden a hundred times by Montagu and Turton, perhaps by Dillwyn and Gaertner, and many another pioneer of science. And once there, before we look at anything else, come down strait to the sea marge; for yonder lies, just left by the retiring tide, a mass of life such as you will seldom see again. It is somewhat ugly, perhaps, at first sight; for ankle-deep are spread, for some ten yards long, ~~by~~ five broad, huge dirty shells, as large as the hand, each with its loathly grey and black tongue hanging out, a confused mass of slimy death. Let us walk on to some cleaner heap, and leave these, the great *Lutraria Elliptica*, which have been lying buried by thousands in the sandy mud, each with the point of its long siphon above the surface, sucking in and driving out again the salt water on which it feeds, till last night's ground-swell shifted the sea bottom, and drove them up hither to perish helpless, but not useless, on the beach.

See, close by is another shell bed, quite as large, but comely enough to please any eye. What a variety of forms and colours are there, amid the purple and olive wreaths of wrack, and bladder-weed, and tangle, (oar-weed, as they call it in the south,) and the delicate green ribbons of the *Zostera*, (the only English flowering plant which grows beneath the sea,) contradicting (as do a hundred other forms) that hasty assertion of hasty Mr. Ruskin, that nature makes no ribbons, unless with a midrib, and I know not what other limitations, which exist only in Mr. Ruskin's most fastidious fancy. What are they all? What are the long white razors? What are the delicate green-grey scimitars? What are the tapering brown spires? What the tufts of delicate yellow plants, like squirrels' tails and lobsters' horns, and tamarisks and fir-trees, and all other finely cut animal and vegetable forms? What are the groups of grey bladders, with something like a little bud at the tip? What are the hundreds of little pink-striped pears? What those tiny babies' heads, covered with grey prickles instead of hair? The great red star-fish which Ulster children call "the bad man's hands;" and the great whelks, which the youth of Musselburgh know as roaring buckies, these we have seen; but what, oh what, are the red capsicums?—

Yes, what are the red capsicums? and why are they poking, snapping, starting, crawling, tumbling, wildly over each other,

rattling about the huge mahogany cockles, as big as a man's two fists, out of which they are protruded? Mark them well, for you will perhaps never see them again. They are a Mediterranean species, or rather three species, left behind upon these extreme south-western coasts, probably at the vanishing of the same warmer ancient epoch, which clothed the Lizard point with the Cornish heath, and the Killarney mountains with Spanish saxifrages, and other relics of a flora whose home is now the Iberian peninsula, and the sunny cliffs of the Riviera. Rare in every other shore, even in the west, it abounds in Torbay to so prodigious an amount, that the dredge, after five minutes' scrape, will often come up choke full of this great cockle only. You will see tens of thousands of them in every cove for miles this day, and every heavy winter's tide brings up an equal multitude,—a seeming waste of life, which would be awful in our eyes, were not the Divine Ruler, as His custom is, making this destruction the means of fresh creation, by burying them in the sands, as soon as washed on shore, to fertilize the strata of some future world. It is but a shell-fish truly; but the great Cuvier thought it remarkable enough to devote to its anatomy elaborate descriptions and drawings, which have done more perhaps than any others to illustrate the curious economy of the whole class of bivalve, or double-shelled, mollusca. If you wish to know more about it than we can tell you, open Mr. Gosse's last book, the *Aquarium*, at p. 222.

“Many persons are aware that the common cockle can perform gymnastic feats of no mean celebrity, but the evolutions of Signor Tuberculato are worth seeing. Some of the troupe I had put into a pan of sea-water; others I had turned out into a dish dry, as knowing that an occasional exposure to the air is a contingency that they are not unused to. By and by, as we were quietly reading, our attention was attracted to the table, where the dish was placed, by a rattling uproar, as if flint stones were rolling one over the other about the dish. ‘Oh, look at the cockles!’ was the exclamation; and they were indeed displaying their agility, and their beauty too, in fine style. The valves of the largest were gaping to the extent of three quarters of an inch; but the intermediate space was filled up by the spongy looking, fleshy mantle, of a semi-pellucid orange hue. At one end protruded the siphons, two thick short tubes, soldered, as it were, into one, and enveloped on all sides in a shaggy fringe of *cirri*, or tentacles. The circular orifices of these tubes—small holes, perfectly round, with a white border—had a curious appearance, as we looked at the heart-shaped end of the valves. The discharging orifices, however, were but rarely visible, being usually closed, while the other remained constantly open. But these things were what we afterwards saw. For some time we could look at nothing but the magnificent foot, and the curious manner in which it was used.

"The two lips of the mantle suddenly separate, and gaping widely all along the front, recede nearly to the valves; while at the same moment a huge organ is thrust out, somewhat like a tongue, nearly cylindrical, but a little flattened, and tapering to a point. Its surface is smooth, and brilliantly glossy, and its colour a fine rich scarlet, approaching to orange; but a better idea of it than can be conveyed by any description, will be obtained by supposing it to be made of polished cornelian."

Hardly that, most amiable and amusing of naturalists; it is too opaque for cornelian, and the true symbol is, as we said before, in form, size, and colour, one of those great red capsciums which hang drying in every Covent-garden seedsman's window. Yet is your simile better than the guess of a certain Countess, who, entering a room where in a couple of *Cardium Tuberculatum* were waltzing about a plate, exclaimed, "Oh dear! I always heard that my pretty red coral came out of a fish, and here it is all alive!"

"This beautiful and versatile foot," continues Mr. Gosse, "is suddenly thrust out sideways, to the distance of four inches from the shell; then its point being curved backwards, the animal pushes it strongly against any opposing object, by the resistance of which the whole animal, shell and all, makes a considerable step forwards. If the cockle were on its native sands, the leaps thus made would doubtless be more precise in their direction, and much more effective; but cooped up with its fellows, in a deep dish, all these Herculean efforts availed only to knock the massive shells against the sides, or roll them irregularly over each other.

"It was curious to notice the extent to which the interior of the cockle was revealed, when the mouth gaped, and the foot was thrust out. By the aid of a candle we could see the interior surfaces of both valves, as it seemed, almost to the very backs. I say *as it seemed*, for so thin is the mantle where it lines the shell, and so closely does it adhere to it; yet every character of the valves, whether as regards colour or irregularity of surface, was distinctly visible; and thus we were able to distinguish the species, not only by their external marks, but by one character drawn from the interior—the ribs in *tuberculatum* extending only half way across the valves, while in *aculeatum* they reach back to the beaks. . . . The former is much the finer species; the valves are more globose, and of a warmer colour; those that I have seen are even more spinous. The mantle is of a rich deep orange, with elevated ribs, corresponding to those of the valves, of a yellow hue. These ribs of the mantle are visible in *aculeatum* also, but in *tuberculatum* they are much more strongly marked, both in form and colour. The siphons display the same orange hue as the mantle-lips, and have a finer appearance than in the other species; the interior of the orifices in both is covered with a layer of white pearly substance, almost luminous. In the foot of *tuberculatum*, which agrees, in the particulars already mentioned, with

that of its congener, I observed a beautiful opalescent gleam when under water."

"*C. tuberculatum*," continues Mr. Gosse, "is far the finest species. The valves are more globose and of a warmer colour; those that I have are even more spinous." Such may have been the case in his specimens; but it has occurred to us now and then to dredge specimens of *C. aculeatum*, which had escaped that rolling on the sand fatal in old age to his delicate spines, and equalled in colour, size, and perfectness, the noble one figured in poor dear old Dr. Turton's "British Bivalves." Besides, *aculeatum* is a far thinner and more delicate shell. And a third species, *C. echinatum*, with curves more graceful and continuous, is to be found now and then with the two former, in which each point, instead of degenerating into a knot, as in *tuberculatum*, or developing from delicate, flat, briar-prickles, into long, straight thorns, as in *aculeatum*, is close-set to its fellow, and curved at the point transversely to the shell, the whole being thus horrid with hundreds of strong tenterhooks, making his castle impregnable to the raveners of the deep. For we can hardly doubt that these prickles are meant as weapons of defence, without which so savoury a morsel as the mollusc within (cooked and eaten largely on some parts of our south coast) would be a staple article of food for sea-beasts of prey. And it is noteworthy, first, that the defensive thorns which are permanent on the two thinner species, *aculeatum* and *echinatum*, disappear altogether on the thicker one, *tuberculatum*, as old age gives him a solid and heavy globose shell, and next, that he too, while young and tender, and liable therefore to be bored through by "buckies" and such murderous univalves, does actually possess the same briar-prickles, which his thinner cousins keep throughout life. Nevertheless, (and here is a curious fact, which makes, like most other facts, pretty strongly against the transmutation of species, and the production of organs by circumstances demanding them,) prickles, in all three species, are as far as we can see, useless in Torbay, where no seal or sea-wolf, (*Anarhichas lupus*,) or other shell-crushing pairs of jaws wander, terrible to lobster and to cockle. Originally intended, as we suppose, to face the strong-toothed monsters of the Mediterranean, these foreigners have settled in shores where their armour is not needed; and yet centuries of idleness and security have not been able to persuade them to lay it by, as it is written, "They continue this day as at the beginning; Thou hast given them a law which shall never be broken."

Enough of *Cardium tuberculatum*. What are the names of the other shells which you have gathered, any Introduction to

Conchology will tell you; and the Sea-side Book will give you many a curious fact as to their habits. If you wish to know more, you must consult that new collection of true fairy tales, Dr. Johnston's "Lectures on Conchology." But the little pink pears are rare, hundreds of them as there happen to be here to-day. They are a delicate sea-anemone,* whose beautiful disc you may see well engraved in Gosse's "Naturalist in Devon." They adhere by thousands to the under-side of loose stones among the sand, and some colony of them has been uprooted by the pitiless roll of the ground-swell, and drifted in here, sick and sad, but not so far gone but that each, in a jar of salt-water, will expand again into a delicate compound flower, whose "snake-locked" arms, are all marbled with pellucid greys and browns, till they look like a living mist, hovering above the pink-striped cylinder of the body.

There are a hundred more things to be talked of here: but we must defer the examination of them till our return; for it wants an hour yet of the dead low spring-tide; and ere we go home, we will spend a few minutes at least on the rocks at Livermead, where awaits us a strong-backed quarryman, with a strong-backed crowbar, as we hope, (for we and he snapped one right across there yesterday, falling miserably on our backs into a pool thereby,) and we will verify Mr. Gosse's observation, that—

"When once we have begun to look with curiosity on the strange things that ordinary people pass over without notice, our wonder is continually excited by the variety of phase, and often by the uncouthness of form under which some of the meaner creatures are presented to us. And this is very specially the case with the inhabitants of the sea. We can scarcely poke or pry for an hour among the rocks, at low-water mark, or walk, with an observant downcast eye, along the beach after a gale, without finding some oddly fashioned, suspicious-looking being, unlike any form of life that we have seen before. The dark concealed interior of the sea becomes thus invested with a fresh mystery; its vast recesses appear to be stored with all imaginable forms, and we are tempted to think there must be multitudes of living creatures whose very figure and structure have never yet been suspected.

"O sea! old sea! who yet knows half
Of thy wonders or thy pride!"

Gosse's Aquarium, pp. 226, 227.

But, first, as after descending the gap in the sea-wall, we walk along the ribbed floor of hard yellow sand, be so kind as to keep a sharp look-out for a round grey disc, about as big as a penny-piece, peeping out at the surface of the sand. No;

* *Actinia anguiformis*.

that is not it, that little lump: open it, and you will find within one of the common little *Venus gallina*.—(They have given it some new name now, and no thanks to them; they are always changing the names, those closet collectors, instead of studying the live animals where Nature has put them, in which case they would have no time for word-inventing. And we verily believe that the names grow, like other things; at least, they get longer and longer and more jaw-breaking every year.) The little bivalve, however, finding itself left by the tide, has wisely shut up its siphons, and, with its foot and its edges, buried itself in a comfortable bath of cool wet sand, till the sea shall come back, and make it safe to crawl and lounge about on the surface, smoking the sea-water instead of tobacco. Neither is that lump what we seek. Touch it, and out poke a pair of astonished and inquiring horns and a little sharp muzzle: it is a long-armed crab, who saw us coming; and wisely shovelled himself into the sand by means of his nether-end. Neither is that; though it might be the hole down which what we seek has vanished: but that burrow contains one of the long white razors which you saw cast on shore at Paignton. The boys close by are boring for them with iron rods, armed with a screw, and taking them in to sell in Torquay market, as excellent food. But there is one, at last! A grey disc pouting up through the sand. Touch it, and it is gone down, quick as light. We must dig it out, and carefully, for it is a delicate monster. At last, after ten minutes' careful work, we have brought up, from a foot depth or more—what? A thick, dirty, slimy worm, without head or tail, form or colour. A slug has more artistic beauty about him. Be it so. At home in the aquarium, (where, alas! he will live but for a day or two,) he will make a very different figure. That is one of the rarest of British sea-animals, *Actinia chrysanthellum*, though really he is no *Actinia*, and his value consists, not merely in his beauty, (though that is not small,) but in his belonging to what the long-word-makers call an "interosculant" group,—a party of genera and species which connect families scientifically far apart, filling up a fresh link in the great chain, or rather the great network of zoological classification. And here we have a simple, and, as it were, crude form, of which, if we dared to indulge in reveries, we might say, that the Divine Word realized before either sea-anemones or holothurians, and then went on to perfect the idea contained in it in two different directions, dividing it into two different families, and making on its model, by adding new organs, and taking away old ones, in one direction, the whole family of *Actiniae*, (sea-anemones,) and in a quite opposite one, the *Holothurice*, those strange sea-cucumbers, with their mouth-fringe of feel!

gills, of which you shall see some anon. Not (understand well) that there has been any "transmutation or development of species," (of individuals, as it ought honestly to be called, if the notion is intended to represent a supposed fact,)—a theory as unsupported by experiment and induction, as it is by *a priori* reason: but that there has been, in the Creative Mind, as it gave life to new species, a development of the idea on which older species were created, in order that every mesh of the great net might gradually be supplied, and there should be no gaps in the perfect variety of Nature's forms. This development is the only one of which we can conceive, if we allow that a Mind presides over the universe, and not a mere brute necessity, a Law (absurd misnomer) without a Lawgiver; and to it (strangely enough coinciding here and there with the Platonic doctrine of Eternal Ideas existing in the Divine Mind,) all fresh inductive discovery seems to point more and more; and especially Professor Owen's invaluable tracts on the Homology of the Vertebrate Skeleton.

Let us speak freely a few words on this important matter. Geology has disproved the old popular belief that the universe was brought into being, as it now exists, by a single fiat. We know that the work has been gradual: that the earth

"In tracts of fluent heat began,
The seeming prey of cyclic storms,
The home of seeming random forms,
Till, at the last, arose the man."

And we know, also, that these forms, seeming random as they are, have appeared according to a law, which, as far as we can judge, has been only the whole one of progress,—lower animals (though we cannot say, the lowest) appearing first, and man, the highest inammal, "the roof and crown of things," one of the latest in the series. We have no more right, let it be observed, to say that man, the highest, appeared last, than that the lowest appeared first. Both may have been the case; but there is utterly no proof of either; and as we know that species of animals lower than those which already existed appeared again and again during the various eras, so it is quite possible that they may be appearing now, and may appear hereafter: and that for every extinct dodo or moa, a new species may be created, to keep up the equilibrium of the whole. This is but a surmise: but it may be wise, perhaps, just now, to confess boldly, even to insist on, its possibility, lest the advocates of the *Vestiges'* theory should claim the notion as making for them, and fancy, from our unwillingness to allow it, that there would be aught in it, if proved, contrary to Christianity.

Let us, therefore, say boldly, that there has been a "progress of species," and there may be again, in the true sense of that term: but say, as boldly, that the Transmutation theory is not one of a progress of *species* at all, which would be a change in the idea of the species, taking place in the Divine Mind,—in plain words, the creation of a new species. What the Transmutationists really mean, if they would express themselves clearly, or carefully analyze their own notions, is, a physical and actual change, not of species, but of *individuals*, of already existing living beings, created according to one idea, into other living beings, created according to another idea. And of this, in spite of the apparent change of species, in the marvellous metamorphoses of lower animals, Nature has as yet given us no instance among all the facts which have been observed; and there is, therefore, an almost infinite inductive probability against it. As far as we know yet, though all the dreams of the Transmutationists are outdone by the transformations of many a *polype*, yet the species remain as permanent and strongly marked as in the highest mammal. Such progress as experimental science actually shows us, is quite awful and beautiful enough to keep us our lives long in wonder; but it is one which perfectly agrees with, and may be perfectly explained by, the simple old belief which the Bible sets before us, of a *Living God*, not a mere past will, such as the Koran sets forth, creating once and for all, and then leaving the universe, to use Goethe's simile, "to spin round his finger;" nor again, an "all-pervading spirit," words which are a mere contradictory jargon, concealing, from those who utter them, blank Materialism: but One who works in all things which have obeyed Him to will and to do of His good pleasure, keeping His abysmal and self-perfect purpose, yet altering the methods by which that purpose is attained, from æon to æon, ay, from moment to moment, for ever various, yet for ever the same. This great and yet most blessed paradox of the Changeless God, who yet can say, "It repenteth me," and "Behold, I work a new thing on the earth," is revealed no less by nature than by Scripture; the changeableness, not of caprice or imperfection, but of an Infinite Maker and "Poietes," drawing ever fresh forms out of the inexhaustible treasury of the primeval mind; and yet never throwing away a conception to which He has once given actual birth in time and space, but (to compare reverently small things and great) lovingly repeating it, reapplying it; producing the same effects by endlessly different methods; or so delicately modifying the method that, as by the turn of a hair, it shall produce endlessly diverse effects; looking back, as it were, ever and anon over the great work of all the ages, to retouch it, and fill up each chasm

in the scheme, which for some good purpose had been left open in earlier worlds, or leaving some open (the forms, for instance, necessary to connect the bimana and the quadrumana) to be filled up perhaps hereafter when the world needs them; the handiwork, in short, of a living and loving *Mind*, perfect in its own eternity, but stooping to work in time and space, and there rejoicing Himself in the work of His own hands, and in His æonian Sabbaths ceasing in rest ineffable, that He may look on that which He hath made, and behold it is very good.

We speak, of course, under correction; for this conclusion is emphatically matter of induction, and must be verified or modified by ever-fresh facts: but we meet with many a Christian passage in scientific books, which seems to us to go, not too far, but rather, not far enough, in asserting the God of the Bible, as Saint Paul says, "not to have left Himself without witness," in nature itself, that He is the God of grace. We shrink from speaking of the God of nature and the God of grace as two antithetical terms: the Bible never, in a single instance, makes the distinction; and, surely, if God be (as He is) the Eternal and Unchangeable One, and (as we all confess) the universe bears the impress of His signet, we have no right, in the present infantile state of science, to put arbitrary limits of our own to the revelation which He may have thought good to make of Himself in nature. Nay rather, let us believe that, if our eyes were opened, we should see His whole likeness, His whole glory, is reflected, as in a mirror, even in the meanest flower; and that nothing but the dulness of our own sinful souls prevents them from seeing day and night in all things, however small or trivial to human eclecticism, the Lord Jesus Christ Himself fulfilling His own saying, "My Father worketh hitherto, and I work."

And therefore, when we meet with such an excellent passage as this:—*

"Thus it is that Nature advances step by step; gradually bringing out, through successive stages of being, new organs and new faculties, and leaving, as she moves along, at every step, some animals which rise no higher, as if to serve for landmarks of her progress through all succeeding time. And this it is which makes the study of comparative anatomy so fascinating. Not that I mean to favour a theory of '*development*,' which would obliterate all idea of species, by supposing that the more compound animal forms were developments of their simple ancestors. For such an hypothesis, Nature gives us no evidence: but she gives us, through all her domains, the most beautiful and diversified proofs of an adherence to a settled order, by which new combinations are continually brought out. In this order, the

* Harvey's Sea-side Book, p. 166.

lowest grades of being have certain characters, above which they do not rise, but propagate beings as simple as themselves. Above them are others which, passing through stages in their infancy equal to the adult condition of those below them, acquire, when at maturity, a perfection of organs peculiarly their own. Others again rise above these, and their structures become more gradually compound; till, at last, it may be said that the simpler animals represent, as in a glass, the scattered organs of the higher races."

—When we read such a passage as this, and confess, as we must, its truth, we cannot help sighing over certain expressions in it, which do unintentionally coincide with the very theory which Professor Harvey denies. Is this progress supposed to take place in time and space, or in the mind of a Being above time and space, who afterwards reduces to act and fact, in time and space, just so much and no more of that progress as shall seem good to Him, some here, some there, not binding Himself to begin at the lowest, and end with the highest, but compensating and balancing the lower with the higher in each successive stage of our planet? This last is what the Professor really means, we doubt not; but then, would that he had said boldly, that "God," and not "Nature," is the agent, so raising the whole matter from the ground of destiny to that of will, from the material and logical ground to the moral and spiritual, from time and space into ever-present eternity. To us it seems to sum up, in a few words, what we have tried to say, that such development and progress as have, as yet, been actually discovered in nature have been proved, especially by Professor Sedgwick and Mr. Hugh Miller, to bear every trace of having been produced by successive acts of thought and will in some personal mind, which, however boundlessly rich and powerful, is still *the Archetype of the human mind*; and therefore, (for to this we boldly confess we have been all along tending,) probably capable, without violence to its properties, of becoming, like the human mind, INCARNATE.

This progress, then, in the divine works, though tending ever to perfection in the very highest sense, need not be always forward and upward, according to the laws of comparative anatomy; and on these grounds it matters little whether the idea of the *Chrysanthellum*, and its congeners *Scolanthus* and *Chirodota*, has been developed downwards into the far lower *Actinia*, as well as upwards into the higher *Holothurians*, (just as the idea of a fish was first realized in the highest type of that class, and not, as has been too hastily supposed, in the lowest; for it is now discovered that the sharks, the earliest of fish, are really higher, not lower, in the scale of creation, than those salmonidæ and perches, which we from habit consider the archetypes and

lords of the finny tribes;) or whether, in this case, all our dream (though right in many another case, as in that of the shark just quoted) is here altogether wrong, and these *Chrysanthella* are merely meant to fill up, for the sake of logical perfection, the space between the ancient rooted polypes and the free echinoderms: yet there is another, and more human, source of interest about this quaint animal who is wriggling himself clean in the glass jar of salt water; for he is one of the many curiosities which has been added to our fauna by that humble hero Mr. Charles Peach, the self-taught naturalist of Cornwall, of whom, as we walk on toward the rocks, something should be said, or rather read; for Mr. Chambers, in an often quoted passage from his *Edinburgh Journal*, which we must have the pleasure of quoting once again, has told the story better than we can tell it:—

“But who is that little intelligent looking man in a faded naval uniform, who is so invariably to be seen in a particular central seat in this section? That, gentle reader, is perhaps one of the most interesting men who attend the Association. He is only a private in the mounted guard (preventive service) at an obscure part of the Cornwall coast, with four shillings a-day, and a wife and nine children, most of whose education he has himself to conduct. He never tastes the luxuries which are so common in the middle ranks of life, and even amongst a large portion of the working-classes. He has to mend with his own hands every sort of thing that can break or wear in his house. Yet Mr. Peach is a votary of Natural History—not a student of the science in books, for he cannot afford books, but an investigator by sea and shore, a collector of zoophytes and echinodermata, strange creatures, many of which are as yet hardly known to man. These he collects, preserves, and describes; and every year does he come up to the British Association with a few novelties of this kind, accompanied by illustrative papers and drawings: thus, under circumstances the very opposite of those of such men as Lord Enniskillen, adding, in like manner, to the general stock of knowledge. On the present occasion he is unusually elated, for he has made the discovery of a *holothuria* with twenty tentacula, a species of the echinodermata, which Professor Forbes, in his *Book on Star-Fishes*, has said was never yet observed in the British seas. It may be of small moment to you who, mayhap, know nothing of *Holothurias*, but it is a considerable thing to the Fauna of Britain, and a vast matter to a poor private of the Cornwall mounted guard. And accordingly he will go home in a few days, full of the glory of his exhibition, and strung anew by the kind notice taken of him by the masters of the science, to similar

inquiries, difficult as it may be to prosecute them under such a complication of duties, professional and domestic. But he has still another subject of congratulation, for Dr. Carpenter has kindly given him a microscope, wherewith to observe the structure of his favourite animals, an instrument for which he has sighed for many years in vain. Honest Peach, humble as is thy home, and simple thy bearing, thou art an honour even to this assemblage of nobles and doctors: nay, more, when we consider everything, thou art an honour to human nature itself; for where is the heroism like that of virtuous, intelligent, independent poverty? And such heroism is thine!"—*Chambers's Edinburgh Journal*, November 23, 1844. *

Mr. Peach is now, we are glad to say, rewarded in part for his long labours in the cause of science, by having been removed to a more lucrative post on the north coast of England; the earnest, it is to be hoped, of still further promotion.

But here we are at the old bank of boulders, the ruins of an antique pier which the monks of Tor Abbey built for their convenience, while Torquay was but a knot of fishing huts within a lonely limestone cove. To get to it, though, we have passed many a hidden treasure; for every ledge of these flat New-red-sandstone-rocks, if torn up with the crowbar, discloses in its cracks and crannies nests of strange form, which shun the light of day; beautiful Actinæ fill the tiny caverns with living flowers; great Pholades bore by hundreds in the softer strata; and wherever a thin layer of muddy sand intervenes between two slabs, long Annelid worms, of quaintest forms and colours, have their horizontal barrows, among those of that curious and rare radiate animal, the spoonworm,* a bag about an inch long, half bluish gray, half pink, with a strange scalloped and wrinkled proboscis of saffron colour, which serves, in some mysterious way, soft as it is, to collect food, and clear its dark passage through the rock.

See, at the extreme low-water mark, where the broad olive fronds of the Laminariæ, like fan-palms, droop and wave gracefully in the retiring ripples, a great boulder which will serve our purpose. Its upper side is a whole forest of sea-weeds, large and small; and that forest, if you examined it closely, as full of inhabitants as those of the Amazon or the Gambia. To "beat" that dense cover would be an endless task; but on the under side, where no sea-weeds grow, we shall find full in view enough to occupy us till the tide returns. For the slab, see, is such a one as sea-beasts love to haunt. Its weed-covered surface shews that the surge has not shifted it for years

past. It lies on other boulders clear of sand and mud, so that there is no fear of dead sea-weed having lodged and decayed under it, destructive to animal life. We can see dark crannies and caves beneath; yet too narrow to allow the surge to wash in, and keep the surface clean. It will be a fine menagerie of Nereus, if we can but turn it.

Now, the crowbar is well under it; heave, and with a will; and so, after five minutes' tugging, propping, slipping, and splashing, the boulder gradually tips over, and we rush greedily upon the spoil.

A muddy dripping surface it is, truly, full of cracks and hollows, uninviting enough at first sight: let us look it round leisurely, to see if there are not materials enough there for an hour's lecture.

The first object which strikes the eye is probably a group of milk-white slugs, from two to six inches long, cuddling snugly together. You try to pull them off, and find that they give you some trouble, such a firm hold have the delicate white sucking arms, which fringe each of their fine edges. You see at the head nothing but a yellow dimple; for eating and breathing are suspended till the return of tide: but once settled in a jar of salt water, each will protrude a large primrose-coloured head, tipped with a ring of ten feathery gills, looking very much like a head of "curled kale," but of the loveliest white and dark chocolate; in the centre whereof lies *perdu* a mouth with sturdy teeth: if indeed they, as well as the whole inside of the worthy fellow, have not been lately got rid of, and what you see be not a mere bag, without intestine or other organ—but only for the time being. For hear it, worn-out epicures, and old Indians who bemoan your livers, this little Holothuria knows a secret which, if he could tell it, you would be glad to buy of him for thousands sterling. For to him blue-pill and muriatic acid are superfluous, and travels to German Brunnen a waste of time. Happy Holothuria! who possesses really that secret of everlasting youth, which ancient fable bestowed on the serpent and the eagle. For when his teeth aches, or his digestive organs trouble him, all he has to do is just to cast up forthwith his entire inside, and *faisant maigre* for a month or so, grow a fresh set, and eat away as merrily as ever. His name, if you wish to consult so triumphant a hygieist, is *Cucumaria Hyndmanni*, named after Mr. Hyndman of Belfast, his first discoverer; but he has many a stout cousin round the Scotch coast, who knows the antibilious panacea as well as he, and submits, among the northern fishermen, to the rather rude and undeserved name of sea-puddings, one of which grows in Shetland, to the enormous length of three feet, rivalling there his huge con-

genera, who display their exquisite plumes on every tropic coral reef.

Next, what are those bright little buds, like salmon-coloured Banksia roses half expanded, sitting closely on the stone? Touch them, and the soft fleshy part is retracted, and the orange flower of flesh is transformed into a pale pink flower of stone. That is the Madrepore, *Caryophyllia smithii*, one of our south coast rarities; and see, on the lip of the last one, which we have carefully scooped off with the chisel, two little pink towers, delicately striated; drop them into this small bottle of sea-water, and from the top of each tower issues every half second—what shall we call it?—a hand or a net of finest hairs, clutching at something invisible to our grosser sense. That is the Pyrgoma, parasitic only (as far as we know) on the lip of this same rare Madrepore; a little “ciphræid,” the cousin of those tiny barnacles which roughen every rock, and of those larger ones also, who burrow in the thick hide of the whale, and, borne about upon his mighty sides, throw out their tiny casting nets, as this Pyrgoma does, to catch every passing animalcule, and sweep them into the jaws concealed within its shell. And this creature, rooted to one spot through life and death, was in its infancy a free swimming animal, hovering from place to place upon delicate cilia, till, having sown its wild oats, it settled down in life, and became a landowner, and a *gleba adscriptus*, for ever and a day. Mysterious destiny—yet not so mysterious as that of the free *medusoids* of every polype and coral, which ends as a rooted tree of horn or stone, and seems to the eye of sensuous fancy to have literally degenerated into a vegetable. Of them you must read for yourselves in Mr. Gosse’s book; in the meanwhile he shall tell you something of the beautiful Madrepores themselves. His description,* by far the best yet published, should be read in full: we must content ourselves with extracts.

“Doubtless you are familiar with the stony skeleton of our Madrepore, as it appears in museums. It consists of a number of thin calcareous plates standing up edgewise, and arranged in a radiating manner round a low centre. A little below the margin, their individuality is lost in the deposition of rough calcareous matter. . . . The general form, more or less cylindrical, commonly wider at the top than just above the bottom. . . . This is but the skeleton; and though it is a very pretty object, those who are acquainted with it alone, can form but a very poor idea of the beauty of the living animal. . . . Let it, after being torn from the rock, recover its equanimity; then you will see a pellucid gelatinous

* A Naturalist’s Rambles in the Devonshire Coast, p. 110.

flesh emerging from between the plates, and little exquisitely formed and coloured tentacula, with white clubbed tips fringing the sides of the cup-shaped cavity in the centre, across which stretches the oval disc marked with a star of some rich and brilliant colour, surrounding the central mouth, a slit with white crenated lips, like the orifice of one of those elegant cowry shells which we put upon our mantel-pieces. The mouth is always more or less prominent, and can be protruded and expanded to an astonishing extent. The space surrounding the lips is commonly tawn colour, or rich chestnut-brown; the star or vandyked circle rich red, pale vermilion, and sometimes the most brilliant emerald green, as brilliant as the gorget of a humming-bird." . . .

And what does this exquisitely delicate creature do with its pretty mouth? Alas for fact! It sips no honey dew, or fruits from paradise.— . . .

"I put a minute spider, as large as a pin's head, into the water, pushing it down to the coral. The instant it touched the tip of a tentacle it adhered, and was drawn in with the surrounding tentacles between the plates. With a lens I saw the small mouth slowly open, and move over to that side, the lips gaping unsymmetrically, while with a movement as imperceptible as that of the hour hand of a watch, the tiny prey was carried along between the plates to the corner of the mouth. The mouth, however, moved most, and at length reached the edges of the plates, and gradually closed upon the insect, and then returned to its usual place in the centre."

Mr. Gosse next tried the fairy of the walking mouth with a house-fly, who escaped only by hard fighting; after which the gentle creature, after swallowing and disgorging various large pieces of shell-fish, found viands to its taste in "the lean of cooked meat, and portions of earth-worms," filling up the intervals by a perpetual dessert of microscopic animalcules, whirled into that lovely avens, its mouth, by the currents of the delicate cilia which clothe every tentacle. The fact is, that the Madrepora, like those glorious sea-anemones whose living flowers stud every pool, is by profession a scavenger, and a feeder on carrion; and being as useful as he is beautiful, really comes under the rule which he stands at first to break, that handsome is who handsome does.

Another species of Madrepora* was discovered on our Devon coast by Mr. Gosse, more gaudy, though not so delicate in hue, as our Caryophyllia; three of which are at this moment pouting out their conical orange mouths and pointed golden tentacles in a vase on our table, at once grumbling and entreating for something to eat. Mr. Gosse's locality, for this and numberless

* *Balanophyllia regia*, Coast of Devon, p. 399.

other curiosities, is Ilfracombe, on the north coast of Devon. Our specimens came from Lundy Island, in the mouth of the Bristol Channel, or more properly that curious "Rat Island" to the south of it, where still lingers the black long-tailed English rat, exterminated everywhere else by his sturdier brown cousin of the Hanoverian dynasty.

Look, now, at these tiny saucers of the thinnest ivory, the largest not bigger than a silver threepence, which contain in their centres a milk-white crust of stone, pierced, under the magnifier, into a thousand cells, each with its living architect within. You see two sorts; in one the tubular cells radiate from the centre, giving it the appearance of a tiny compound flower, daisy or groundsel; in the other they are crossed with waving grooves, giving the whole a peculiar fretted look, even more beautiful than that of the former species. They are *Tubulipora patina* and *Tubulipora hispida*;—and stay—break off that tiny rough red wart, and look at its cells also under the magnifier: it is *Cellepora pumicosa*; and now, with the Madrepora you hold in your hand the principal, at least the commonest, British types of those famed coral insects, which in the tropics are the architects of continents, and the conquerors of the ocean surge. All the world, since the publication of Darwin's delightful "Voyage of the Beagle," and of Williams's "Missionary Enterprises," knows, or ought to know, enough about them: for those who do not, there are a few pages in the beginning of Dr. Landsborough's "British Zoophytes," well worth perusal.

There are a few other true cellepore corals round the coast. The largest of all, *Cervicornis*, may be dredged a few miles outside on the Exmouth bank, and a few more *Tubulipores*; but all tiny things, the lingering, and, as it were, expiring remnants of that great coral-world, which, through the abyssal depths of past ages, formed here in Britain our limestone hills, storing up for generations yet unborn the materials of agriculture and architecture. Inexpressibly interesting, even solemn, to those who will think, is the sight of these puny parasites, which as it were connect the ages and the zones: yet not so solemn and full of meaning as that tiny relic of an older world, the little pear-shaped *Turbinolia*, (cousin of the Madrepores and Sea-anemones,) found fossil in the Suffolk Crag, and yet still lingering here and there alive in the deep water off Scilly and the west coast of Ireland, possessor of a pedigree which dates, perhaps, from ages before the day in which it was said, "Let us make man in our image, after our likeness." To think that the whole human race, its joys and its sorrows, its virtues and its sins, its aspirations and its failures, has been rushing out of eternity and into eternity again, as Arjoun in

the Bhagavad Gita behold the race of men, issuing from Kreesna's flaming mouth, and swallowed up in it again, "as the crowds of insects swarm into the flame, as the homeless streams leap down into the ocean bed," in an everlasting heart-pulse whose blood is living souls. And all that while, and ages before that mystery began, that humble coral, unnoticed on the dark sea-floor, has been "continuing as it was at the beginning," and fulfilling "the law which cannot be broken," while races and dynasties and generations have been

"Playing such fantastic tricks before high heaven,
As make the angels weep."

Yes; it is this vision, of the awful permanence and perfection of the natural world, beside the wild flux and confusion, the mad struggles, the despairing cries of that world of spirits which man has defiled by sin, which would at moments crush the naturalist's heart, and make his brain swim with terror, were it not that he can see by faith, through all the abysses and the ages, not merely

"Hands,

From out the darkness, shaping man;"

but above them a living loving countenance, human and yet divine; and can hear a voice which said at first, "Let us make man in our image;" and hath said since then, and says for ever and for ever, "Lo, I am with you always, even to the end of the world."

But now, friend, who listenest, perhaps instructed, and at least amused—if, as Professor Harvey well says, the simpler animals represent, as in a glass, the scattered organs of the higher races, which of your organs is represented by that "sca'd man's head," which the Devon children more gracefully, yet with less adherence to plain likeness, call "mermaid's head," which we picked up just now on Paignton Sands? Or which, again, by its more beautiful little congener,† five or six of which are adhering tightly to the slab before us, a ball covered with delicate spines of lilac and green, and stuck over (cunning fellow!) with strips of dead sea-weed to serve as improvised parasols? One cannot say, (though Oken and the Okenists might) that in him we have the first type of the human skull; for the resemblance, quaint as it is, is only sensuous and accidental, (in the logical use of that term,) and not homological, i. e., a lower manifestation of the same idea. Yet how is one tempted to say, that it was still Nature's first and lowest attempt at that use of hollow globes of mineral for protecting soft fleshy parts,

* *Amphidotus conchatus*.

† *Echinus miliaris*.

which she afterwards developed to such perfection in the skulls of vertebrate animals. Yet no; even that conceit, pretty as it sounds, will not hold good; for though Radiates similar to these were among the earliest tenants of the abyss, yet as early as their time, perhaps even before them, had been conceived and actualized, in the sharks, and Mr. Hugh Miller's pets the old red sandstone fishes, that very true vertebrate skull and brain, of which this is a mere mockery.* Here the whole animal, with his extraordinary feeding mill, (for neither teeth nor jaws are fit words for it,) is enclosed within an ever-growing limestone castle, to the architecture of which the Eddystone and the Crystal Palace are bungling heaps; without arms or legs, eyes or ears, and yet capable, in spite of his perpetual imprisonment, of walking, feeding, and living, doubt it not, merrily enough. But this result has been attained at the expense of a complication of structure, which has baffled all human analysis and research into final causes. As much concerning this most miraculous of families as is needful to be known, and ten times more than is comprehended, may be read in Professor Harvey's Sea-Side Book, pp. 142-148,—pages from which you will probably arise with a dizzy sense of the infinity of nature, and a conviction that The Creative Word, so far from having commenced, as some fancy, with the simplest, and, as it were, easiest forms of life, took delight, as it were, in solving the most difficult and complicated problems first of all, with a certain divine prodigality of wisdom and of power; and that before the mountains were brought forth, or even the earth and the world was made, He was God from everlasting, the same yesterday, to-day, and for ever. Conceive a Crystal Palace, (for mere difference in size, as both the naturalist and the metaphysician know, has nothing to do with the wonder,) whereof each separate joist, girder, and pane grows continually without altering the shape of the whole; and you have conceived only one of the miracles embodied in that little sea-egg, which The Divine Word has, as it were to justify to man His own immutability, furnished with a shell capable of enduring fossil for countless ages, that we may confess Him to have been as great when first His spirit brooded on the deep, as He is now, and will be through all worlds to come.

But we must make haste; for the tide is rising fast, and our stone will be restored to its eleven hours' bath, long before we have talked over half the wonders which it holds. Look though, are you retreat, at one or two more.

* See Professor Spedwick's last edition of the *Diagnoses on the Studies of Cambridge*.

What is that little brown fellow whom you have just taken off the rock to which he adhered so stoutly by his sucking-foot? A limpet? Not at all: he is of quite a different family and structure; but, on the whole, a limpet-like shell would suit him well enough, so he had one given him: nevertheless, owing to certain anatomical peculiarities, he needed one aperture more than a limpet; so one, if you will examine, has been given him at the top of his shell.* This is one instance among a thousand of the way in which a scientific knowledge of objects must not obey, but run counter to, the impressions of sense; and of that custom in nature which makes this caution so necessary, namely, the repetition of the same form, slightly modified, in totally different animals, sometimes as if to avoid waste, (for why should not the same conception be used in two different cases, if it will suit in both?) and sometimes, (more marvellous by far,) when an organ fully developed and useful in one species, appears in a cognate species, but feeble, useless, and, as it were, abortive, and gradually, in species still farther removed, dies out altogether; placed there, it would seem, at first sight, merely to keep up the family likeness. We are half jesting, that cannot be the only reason, perhaps not the reason at all; but the fact is one of the most curious, and notorious also, in comparative anatomy.

Look, again, at those sea-slugs. One, some three inches long, of a bright lemon yellow, clouded with purple, another a dingy grey,† another (exquisite little creature) of a pearly French white,‡ furred all over the back with what seem arms, but are really gills, of ringed white, and grey, and black. Put that yellow one into water, and from his head, above the eyes, arise two serrated horns, while, from the after part of his back spring a circular Prince-of-Wales'-feather of gills,—they are almost exactly like those which we saw just now in the white *Cucumaria*. Yes; here is another instance of that same custom of repetition. The *Cucumaria* is a low radiate animal—the sea-slug a far higher mollusc; and every organ within him is formed on a different type; as indeed are those seemingly identical gills, if you come to examine them under the microscope, having to oxygenate fluids of a very different and more complicated kind; and, moreover, the *Cucumaria*'s gills were put round his mouth; the *Doris*'s feathers round the other extremity; that grey *Eolis*'s, again, are simple clubs, scattered over his whole back, and in each of his nudibranch congeners these same gills take some new and fantastic form; in *Malibea* those clubs are covered

* *Stomatopoda grana.*

† *Eolis pagillata.*

‡ *Doris suberulata* and *blinensis.*

with warts; in *Scyllæa*, with tufted bouquets; in the beautiful *Antiope** they are transparent bags; and in many other English species they take every conceivable form of leaf, tree, flower, and branch, bedecked with every colour of the rainbow, as you may see them depicted in Messrs. Alder and Hancock's unrivalled Monograph on the Nudibranch Mollusca.

And now, worshipper of final causes, and the mere useful in Nature, answer but one question,—Why this prodigal variety? All these Nudibranchs live in much the same way, why would not the same mould have done for them all? And why, again, (for we must push the argument a little further,) why have not all the butterflies, at least all who feed on the same plant, the same markings? Of all-unfathomable triumphs of design, (we can only express ourselves thus, for honest induction, as Paley so well teaches, allows us to ascribe such results only to the design of some personal will and mind,) what surpasses that by which the scales on a butterfly's wing are arranged to produce a certain pattern of artistic beauty beyond all painter's skill? What a waste of power, on any utilitarian theory of nature! And once more, why are those strange microscopic atomies, the *Diatomaceæ* and *Infusoria*, which fill every stagnant pool, fringe every branch of sea-weed, which form banks hundreds of miles long on the Arctic sea-floor, and the strata of whole moorlands, which pervade in millions the mass of every iceberg, and float aloft in countless swarms amid the clouds of the volcanic dust,—why are their tiny shells of flint as fantastically various in their quaint mathematical symmetry, as they are countless beyond the wildest dreams of the Pantheist? Mystery inexplicable on all theories of evolution by necessary laws, as well as on the conceited notion which, making man forsooth the centre of the universe, dares to believe that variety of forms has existed for countless ages in abyssal sea-depths and untrodden forests, only that some few individuals of the western races might, in these latter days, at last discover and admire a corner here and there of the boundless realms of beauty. Inexplicable, truly, if man be the centre and the object of their existence; explicable enough to him who believes that God has created all things for Himself, and rejoices in His own handiwork, and that the material universe is, as the wise man says, “A platform whereon His eternal Spirit sports and maketh melody.” Of all the blessings which the study of nature brings to the patient observer, let none, perhaps, be classed higher than this, that the further he enters into those fairy gardens of life and birth, which Spenser saw and described in his great poem, the

* Gosse's “Naturalist in Devon,” p. 325.

more he learns the awful and yet most comfortable truth, that they do not belong to him, but to one greater, wiser, lovelier than he; and as he stands, silent with awe, amid the pomp of nature's ever-busy rest, hears, as of old, "The Word of the Lord God walking among the trees of the garden in the cool of the day."

One sight more, and we have done. We had something to say, had time permitted, on the ludicrous element which appears here and there in nature. There are animals, like monkeys and crabs, which seem made to be laughed at; by those at least who possess that most indefinable of faculties, the sense of the ridiculous. As long as man possesses muscles especially formed to enable him to laugh, we have no right to suppose (with some) that laughter is an accident of our fallen nature, or to find (with others) the primary cause of the ridiculous in the perception of unfitness or disharmony. And yet we shrink (whether rightly or wrongly, we can hardly tell) from attributing a sense of the ludicrous to the Creator of these forms. It may be a weakness on our part, at least we will hope it is a reverent one: but till we can find something corresponding to what we conceive of the Divine Mind in any class of phenomena, we had rather not talk about them at all, but observe a stoic "epoché," waiting for more light, and yet confessing that our own laughter is uncontrollable, and therefore we hope not unworthy of us, at many a strange creature and strange doing which we meet, from the highest ape to the lowest polype.

But, in the meanwhile, there are animals in which results so strange, fantastic, even seemingly horrible, are produced, that fallen man may be pardoned, if he shrinks from them in disgust. That, at least, must be a consequence of our own wrong state; for everything is beautiful and perfect in its place. It may be answered, "Yes, in its place; but its place is not yours. You had no business to look at it, and must pay the penalty for intermeddling." We doubt that answer: for surely, if man have liberty to do anything, he has liberty to search out freely his heavenly Father's works; and yet every one seems to have his antipathic animal; and we know one bred from his childhood to zoology by land and sea, and bold in as-erting, and honest in feeling, that all, without exception, is beautiful, who yet cannot, after handling and petting and admiring all day long every uncouth and venomous beast, avoid a paroxysm of horror at the sight of the common house-spider. At all events, whether we were intruding or not, in turning this stone, we must pay a fine for having done so; for there lies an animal as foul and monstrous to the eye as "hydra, gorgon, or chimæra dire," and yet so wondrously fitted to its work, that we must needs endure, for our own instruction, to handle and to look at it. Its name we

know not, (though it lurks here under every stone,) and should be glad to know. It seems some very "low" Ascarid or Planarian worm. You see it? That black, shiny, knotted lump among the gravel, small enough to be taken up in a dessert-spoon. Look now, as it is raised, and its coils drawn out. Three feet—six—nine, at least: with a capability of seemingly endless expansion; a shiny tape of living caoutchouc, some eighth of an inch in diameter, a dark chocolate-black, with paler longitudinal lines. Is it alive? It hangs helpless and motionless, a mere velvet string across the hand. Ask the neighbouring Annelids and the fry of the rock fishes, or put it into a vase at home, and see. It lies motionless, trailing itself among the gravel; you cannot tell where it begins or ends; it may be a dead strip of sea-weed, *Himantalia lorea* perhaps, or *Chorda filum*; or even a tarred string. So thinks the little fish who plays over and over it, till he touches at last what is too surely a head. In an instant a bell-shaped sucker mouth has fastened to his side. In another instant, from one lip, a concave double proboscis, just like a tapir's, (another instance of the repetition of forms,) has clasped him like a finger; and now begins the struggle: but in vain. He is being "played" with such a fishing-line as the skill of a Wilson or a Stoddart never could invent; a living line, with elasticity beyond that of the most delicate fly rod, which follows every lunge, shortening and lengthening, slipping and twining round every piece of gravel and stem of sea-weed, with a timing drag such as no Highland wrist or step could ever bung to bear on salmon or on trout. The victim is tired now; and slowly, and yet dexterously, his blind assailant is feeling and shifting along his side, till he reaches one end of him; and then the black lips expand, and slowly and surely the curved finger begins packing him end-foremost down into the gullet, where he sinks, inch by inch, till the swelling which marks his place is lost among the coils, and he is probably macerated to a pulp long before he has reached the opposite extremity of his cave of doom. Once safe down, the black murderer slowly contracts again into a knotted heap, and lies, like a boa with a stag inside him, motionless and blest.

There; we must come away now, for the tide is over our ankles: but touch, before you go, one of those little red mouths which peep out of the stone. A tiny jet of water shoots up almost into your face. The bivalve* who has burrowed into the limestone knot (the softest part of the stone to his jaws, though the hardest to your chisel) is scandalized at having the soft mouths of his siphons so rudely touched, and taking your

* *Saxicava rugosa*.

finger for some bothering Annelid, who wants to nibble him, is defending himself; shooting you, as naturalists do humming-birds, with water. Let him rest in peace; it will cost you ten minutes' hard work, and much dirt, to extract him: but if you are fond of shells, secure one or two of those beautiful pink and straw-coloured scallops,* who have gradually incorporated the layers of their lower valve with the roughnesses of the stone, destroying thereby the beautiful form which belongs to their race, but not their delicate colour. There are a few more bivalves too, adhering to the stone, and those rare ones, and two or three delicate *Mangelia* and *Nassa* are trailing their graceful spires up and down in search of food. That little bright red and yellow pea, too, touch it—the brilliant coloured cloak is withdrawn, and, instead, you have a beautifully ribbed pink cowry,† our only European representative of that grand tropical family. Cast one wondering glance, too, at the forest of zoophytes and corals, *Lepralia* and *Flustra*, and those quaint blue stars, set in brown jelly, which are no zoophytes, but respectable molluscs, each with his well-formed mouth and intestines,‡ but combined in a peculiar form of Communism, of which all one can say is, that one hopes they like it; and that, at all events, they agree better than the heroes and heroines of Mr. Hawthorne's Blithedale Romance.

Now away, and as a specimen of the fertility of the water-world, look at this rough list of species,§ the greater part of

* <i>Pecten pusio</i> .	† <i>Cypræa Europæa</i> .	‡ <i>Botrylls</i> .
§ <i>Molluscs</i> .	<i>Molluscs</i> —continued.	<i>Polyps</i> —continued.
<i>Doris tuberculata</i> .	<i>Cynthia</i> ,—2 species.	<i>Sertularia rugosa</i> .
— <i>Bilmeata</i> .	<i>Botryllus</i> , do.	— fallax.
<i>Eolis papillosa</i> .	<i>Sydium</i> †	— <i>flicula</i> .
<i>Pleurobranchus pumila</i> .	●	<i>Planularia falcata</i> .
<i>Neritina</i> .	<i>Annelids</i> .	— <i>setacea</i> .
<i>Cypræa</i> .	<i>Phyllodoce</i> , and other Nereid worms.	<i>Laomedæa geniculata</i> .
<i>Trochus</i> ,—2 species.	<i>Polydora squamata</i> .	<i>Campanularia volubilis</i> .
<i>Mangelia</i> .		<i>Actinia mesembryanthemonum</i> .
<i>Triton</i> .	<i>Crustacea</i> .	— <i>clavata</i> .
<i>Trophon</i> .	4 or 5 species.	— <i>anguicomæ</i> .
<i>Nassa</i> ,—2 species.	<i>Echinoderms</i> .	— <i>crassicornis</i> .
<i>Cerithium</i> .	<i>Echinus miliaris</i> .	<i>Tubulipora patina</i> .
<i>Signoretus</i> .	<i>Asterias gibbosa</i> .	— hispida.
<i>Fissurella</i> .	<i>Ophiocoma neglecta</i> .	— serpens.
<i>Arca lactea</i> .	<i>Cucumaria Hyndmanni</i> .	<i>Crisia eburnea</i> .
<i>Pecten pusio</i> .	— <i>communis</i> .	<i>Cellepora pumicosa</i> .
<i>Tapes palliata</i> .		<i>Lepraliæ</i> ,—many species.
<i>Kellia suborbicularis</i> .		<i>Membranipora pilosa</i> .
<i>Sphaenia Binghami</i> .		<i>Cellularia ciliata</i> .
<i>Saxicava rugosa</i> .		— <i>scruposa</i> .
<i>Gastrochona pholadia</i> .	<i>Polypes</i> .	— <i>reptans</i> .
<i>Pholis patva</i> .	<i>Sertularia pumila</i> .	<i>Flustra membranacea</i> , &c.
<i>Anomia</i> ,—2 or 3 species.		

which are on this very stone, and all of which you might obtain in an hour, would the rude tide wait for zoologists; and remember, that the number of individuals of each species of polype must be counted by tens of thousands, and also, that, by searching the forest of sea-weeds which covers the upper surface, we should probably obtain some twenty minute species more.

A goodly catalogue this, surely, of the inhabitants of three or four large stones; and yet how small a specimen of the multitudinous nations of the sea. From the bare rocks above high-water mark, down to abysses deeper than ever plummet sounded, is life, everywhere life; fauna after fauna, and flora after flora, arranged in zones, according to the amount of light and warmth which each species requires, and to the amount of pressure which they are able to endure. The crevices of the highest rocks, only sprinkled with salt spray in spring-tides and high gales, have their peculiar little univalves, their crisp lichen-like sea-weeds, in myriads; lower down, the region of the *Fuci* (bladder-weeds) has its own tribes of periwinkles and limpets; below again, about the neap-tide mark, the region of the corallines and *Algae* furnishes food for yet other species who graze on its watery meadows; and beneath all, only uncovered at low spring-tide, the zone of the *Laminarie* (the great tangles and oar-weeds) is most full of all of every imaginable form of life. So that as we descend the rocks, we may compare ourselves (likening small things to great) to those who, descending the Andes, pass in a single day from the vegetation of the Arctic zone to that of the Tropics. And here and there, even at half-tide level, deep rock-basins, shaded from the sun, and always full of water, keep up, in a higher zone, the vegetation of a lower one, and afford, in miniature, an analogy to those deep "barrancos" which split the high table-land of Mexico, down whose awful cliffs, swept by cool sea-breezes, the traveller looks from among the plants and animals of the temperate zone, and sees far below, dim through their everlasting vapour-bath of rank hot steam, the mighty forms and gorgeous colours of a tropic forest.

"I do not wonder," says Mr. Gosse, in his charming "Naturalist's Rambles on the Devonshire Coast,"* "that when Southey had an opportunity of seeing some of those beautiful quiet basins hollowed in the living rock, and stocked with elegant plants and animals, having all the charm of novelty to his eye, they should have moved his poetic fancy, and found more than one place in the gorgeous imagery of his oriental romances. Just listen to him:

“ It was a garden still beyond all price,
 Even yet it was a place of paradise ;
 * * * * *
 And here were coral bowers,
 And grotts of madrepores,
 And banks of sponge, as soft and fair to eye
 As e'er was mossy bed
 Whereon the wood-nymphs lie
 With languid limbs in summer's sultry hours.
 Here, too, were living flowers,
 Which, like a bud compacted,
 Their purple cups contracted ;
 And now in open blossom spread,
 Stretch'd, like green anthers, many a seeking head.
 And arborets of jointed stone were there,
 And plants of fibre, fine as silkworm's thread ;
 Yea, beautiful as mermaid's golden hair
 Upon the waves dispread.
 Others that, like the broad banana growing,
 Rais'd their long wrinkled leaves of purple hue,
 Like streamers wide outflowing.”

(*Kekamae*, xvi. 5.)

“ A hundred times you might fancy you saw the type, the very original of this description, tracing, line by line, and image by image, the details of the picture ; and acknowledging, as you proceed, the minute truthfulness with which it has been drawn. For such is the loveliness of nature in these secluded reservoirs, that the accomplished poet, when depicting the gorgeous scenes of eastern mythology, scenes the wildest and most extravagant that imagination could paint, drew not upon the resources of his prolific fancy for imagery here, but was well content to jot down the simple lineaments of nature as he saw her in plain, homely England.

“ It is a beautiful and fascinating sight for those who have never seen it before, to see the little shrubberies of pink coralline—‘ the arborets of jointed stone ’—that fringe those pretty pools. It is a charming sight to see the crimson banana-like leaves of the *Delasseria* waving in their darkest corners ; and the purple, fibrous tufts of *Polysiphonia* and *Ceramium*, ‘ fine as silkworm's thread.’ But there are many others which give variety and impart beauty to these tide-pools. The broad leaves of the *Ulva*, finer than the finest cambric, and of the brightest emerald-green, adorn the hollows at the highest level, while, at the lowest, wave tiny forests of the feathery *Ptilota* and *Dasya*, and large leaves, cut into fringes and furlbells, of rosy *Rhodomenia*. All these are lovely to behold ; but I think I admire as much as any of them, one of the commonest of our marine plants, *Chondrus crispus*. It occurs in the greatest profusion on this coast, in every pool between tide-marks ; and everywhere—except in those of the highest level, where constant exposure to light dwarfs the plant, and turns it of a dull umber-brown tint—it is elegant in form

and brilliant in colour. The expanding fan-shaped fronds, cut into segments, cut, and cut again, make fine bushy tufts in a deep pool, and every segment of every frond reflects a flush of the most lustrous azure, like that of a tempered sword-blade."—*Gosse's Devonshire Coast*, pp. 187-169.

And the sea bottom, also, has its zones, at different depths, and its peculiar forms in peculiar spots, affected by the currents and the nature of the ground, the riches of which have to be seen, alas! rather by the imagination than the eye; for such spoonfuls of the treasure as the dredge brings up to us, come too often rolled and battered, torn from their sites and contracted by fear, mere hints to us of what the populous reality below is like. And often, standing on the shore at low tide, has one longed to walk on and in under the waves, as the water-ousel does in the pools of the mountain-burn, and see it all but for a moment; and a solemn beauty and meaning has invested the old Greek fable of Glaucus the fisherman, how he ate of the herb which gave his fish strength to leap back into their native element, and seized on the spot with a strange longing to follow them under the waves, and became for ever a companion of the fair semi-human forms with which the Hellenic poets peopled their sunny bays and firths, feeding his "silent flocks" far below on the green *Zostera* beds, or basking with them on the sunny ledges in the summer noon, or wandering in the still bays or sultry nights amid the choir of Amphitrite and her sea-nymphs,

"Joining the bliss of the gods, as they waken the coves with their laughter,"

In nightly revels, whereof one has sung,—

'So they came up in their joy; and before them the roll of the surges

Sank, as the breezes sank dead, into smooth green foam-flecked marble

Awed; and the crags of the cliffs, and the pines of the mountains were silent.

So they came up in their joy, and around them the lamps of the sea-nymphs

Myriad fiery globes, swam heaving and panting, and rainbows, Crimson and azure and emerald, were broken in star-showers, lighting

Far in the wine-dark depths of the crystal, the gardens of Nereus, Coral and sea-fan and tangle, the blooms and the palms of the ocean.

So they went on in their joy, more white than the foam which they scattered,

Laughing and singing and tossing and twining, while eager, the Tritons

Blinded with kisses their eyes, unproved, and above them in
worship
Fluttered the terns, and the sea-gulls swept past them on silvery
pinions,
Echoing softly their laughter; around them the wantoning dol-
phins
Sighed as they plunged, full of love; and the great sea-horses
which bore them
Curved up their crests in their pride to the delicate arms which
embraced them;
Pawing the spray into gems, till a fiery rainfall, unharmed,
Sparkled and gleamed on the limbs of the maids, and the coils of
the mermen.
So they went on in their joy, bathed round with the fiery coolness,
Needing nor sun nor moon, self-lighted, immortal: but others
Pitiful, floated in silence apart; on their knees lay the sea-boys
Whelmed by the roll of the surge, swept down by the anger of
Nereus;
Hapless, whom never again upon quay or on strand shall their
mothers
Welcome with garlands and vows to the temples; but wearily
pining,
Gaze over island and main for the sails which return not; they
heedless
Sleep in soft bosoms for ever, and dream of the surge and the
sea-maids.
So they pass by in their joy, like a dream, down the murmuring
ripples."

Such a rhapsody may be somewhat out of order, even in a popular scientific article; and yet one cannot help at moments envying the old Greek imagination, which could inform the soulless sea-world with a human life and beauty. For after all, star-fishes and sea-anemones are dull substitutes for Sirens and Tritons; the lamps of the sea-nymphs, those glorious phosphorescent medusæ whose beauty Mr. Gosse sets forth so well with pen and pencil, are not as attractive as the sea-nymphs themselves would be; and who would not, like Ulysses, take the gray old man of the sea himself asleep upon the rocks, rather than one of his seal-herd, probably too with the same result as the world-famous combat in the Antiquary between Hector and Phœbe? And yet—is there no human interest in these pursuits, more human, ay, and more divine, than there would be even in those Triton and Nereid dreams, if realized to sight and sense? Heaven forbid that those should say so, whose wanderings among rock and pool have been mixed up with holiest passages of friendship and of love, and the intercommunion of equal minds and sympathetic hearts, and of the laugh of

children drinking in health from every breeze, and instruction at every step, running ever and anon with proud delight to add their little treasure to their father's stock, and of happy friendly evenings spent over the microscope and the vase, in examining, arranging, preserving, noting down in the diary the wonders and the labours of the happy, busy day. No; such short glimpses of the water world as our present appliances afford us, are full enough of pleasure; and we will not envy Glaucus; we will not even be over-anxious for the success of his only modern imitator, the French naturalist who is reported to have just fitted himself with a waterproof dress and breathing apparatus, in order to walk the bottom of the Mediterranean, and see for himself how the world goes on at the fifty-fathom line. We will be content with dredging next year as we dredged this, and in the meanwhile let Mr. Gosse tell us some of the pleasures of that little-known amusement:—

“The dredge is a strong bag with an iron frame around the mouth, which is drawn over the sea-bottom by a rope. The rudest form of the instrument is that used for procuring oysters. The bag is generally made of iron rings linked together, and one of the longer sides of the frame is turned up to make a scraping-lip.

“But the naturalists' dredge is an improvement upon this form; the oyster-dredge, with all the care employed in heaving, will frequently turn over in sinking, so that the unlippled side of the frame which will not scrape is on the ground. Hence we have each of the two long sides of the mouth made into a scraping-lip, so that the instrument cannot fall wrong. Instead of rings our body is made of spun-yarn (a sort of small rope,) or fishing-line, netted with a small mesh; or which is still better, of a raw hide, (such as those which the tobacco-nists receive from South America inclosing tobacco, the hides of the wild cattle of the Pampas,) cut into thongs, and netted in like manner. Sometimes the bag is made of coarse sackcloth, or of canvass, but the former soon wears out, and the latter is not sufficiently pervious to water; an important point, for if there be not a free current through the bag, while on the bottom, it embraces nothing, merely driving everything before it, and coming up empty. The hide-net is almost indestructible.

“To the two ends, or short sides of the frame, which forms an oblong square, are attached by a hinge two long triangles, which, meeting in front at some distance from the mouth, are connected by a swivel-joint. To this the dragging rope is bent, which must be long enough to allow thrice as much at least to be overboard as the perpendicular depth would require; if you are dredging in ten fathoms, you must use at least thirty fathoms of line, or your dredge will make long jumps over the ground instead of steadily raking it. The inward end of the rope having been made fast to one of the thwarts, the dredge is hove to windward, and the boat is put before the wind, or at least allowed a flowing sheet.

* * * * *

"But before we ran down to our dredging ground, my master of the ceremonies proposed that we should haul up a point or two, and have a scrape on the *Zostera* beds that cover many acres of shallow water in the bight of Preston Valley. But let me introduce my man to you. A clever fellow is Jone, and though only bred as a fisherman, he is quite an amateur naturalist. There is nobody else in Weymouth harbour that knows anything about dredging; (I have it from his own lips, so you may rely upon it;) but he is familiar with the feel of almost every yard of bottom from Whitenose to Church-Hope, and from St. Aldham's Head to the Bill. He follows dredging with the zest of a *savant*; and it is amusing really to hear how he pours forth the crackjaw, the sesquipedalian nomenclature. 'Now, Sir, if you do want a *Gastrochaena*, I can just put down your dredge upon a lot of 'em; we'll bring up three and four in a stone.' 'I'm in hopes we shall have a good *Cribella* or two off this bank, if we don't get choked up with 'læm 'pre *Ophicomus*.' He tells me in confidence that he has been sore puzzled to find a name for his boat, but has at length determined to appellate her 'The Turritella, just to astonish the fishermen, you know, Sir,'—with an accompanying wink and chuckle, and a patronizing nudge in my ribs. Jone is a proud man when he gets a real *savant* alone in a boat; and he talks with delight of the feats which he has achieved in the dredging line for Mr. Bowerbank, Mr. Hanley, and Professor Forbes.

* * * * *

"Well, here we are in the bight, just off the mouth of Preston Valley, the only bit of pretty scenery anywhere near. This, however, is a little gem; a verdant dell opening to the sea, through which a streamlet runs, with the sides and bottom covered with woods, a rare feature in this neighbourhood. We are over the *Zostera*: the beds of dark green grass are waving in the heave of the swell, and we can make out the long and narrow blades by closely looking down beneath the shadow of the boat.* Here then is the place for the keel-drag. Down it goes and sinks into the long grass, while we slowly drag it for a couple of hundred yards or so.

"When disposed to try our luck, we hauled on the rope till we got the mouth of the drag to the top of the water; a turn or hitch was then taken round a belaying pin, with the two side lines of the bridle, and the point of the net only was then hauled on board, put into a pan of water and untied. Here was congregated the chief part of the prey taken, and hence the need of having the meshes so small in this part. Out swam in a moment a good many little fishes that haunt the grass-bed; as Pipe-fishes (*Syngnathus*) of several species, Gobies (*Gobius unipunctatus*, &c. &c.), and bright blue Conners, (*Labrus* and *Crenilabrus*). With these were two or three active and charming Cuttles, (*Sepiola*); and clinging to the meshes of the net in various parts, were several species of Nudibranch Mollusca, creatures of remarkable elegance and beauty.

* * * * *

"Meanwhile we put the boat before the wind, and run along the inhospitable coast on our left. We leave the pleasant vale behind, and skim swiftly by the black rocks of Ratcliff Head, and the distorted and confused strata of Goggin's Berrow. We pass Osmington Mills, where a rather ample sheet of water is poured in a foaming cascade over the low cliffs, and where those curious circular blocks of grit-stone, flat on one side and conical on the other, are imbedded with regularity on the sandy face of the precipice: and leave on our quarter the rocks, where the abundance of iron pyrites and sulphur has more than once presented the strange phenomenon of spontaneous fire; a phenomenon distinctly remembered still by the inhabitants of Weymouth, who night after night used to gaze out with wonder on the burning cliffs.

"At length we are under Whitenose, that bold chalk cliff that is so prominent an object as the eye roves along the coast line from Weymouth. Here we turn the boat's edge to the southward, and throw the dredge overboard in fourteen fathoms. And while I am enjoying with the line in my hand, what a dredger particularly likes to feel, the vibration produced by the instrument as it rumbles and scrapes over a moderately rough bottom, telling that it is doing its work well,—we will gaze with admiration on this magnificent precipice of dazzling white that rears its noble head behind us. It is the termination of that range of chalk hills which, with some few interruptions, intersect the kingdom from the Yorkshire coast to Dorset: and stands in simple majesty, the snowy whiteness of its vast face unvaried, except by the slanting lines which mark the dipping strata running across it, and which look so fine and so regular, as if they had been drawn by the pen of a geometrician.

* * * * *

"But up with the dredge; let us see our success. It feels pretty heavy as it mounts, and here, as it breaks the surface, we can already see some bright-hued and active creatures in its capacious bag. A wide board, resting on two thwarts, serves for a table, and on this—a few of the more delicate things, that appear at a glance, having been first taken out—the whole contents are poured. The empty dredge is returned to the deep for another haul, while we set eagerly to work with fingers and eyes on the heap before us.

"What a pleasure it is to examine a tolerably prolific dredge-haul! I am not going to enumerate all the things that we found; it would make a pretty long list. Numbers of rough stones, and of old worm-eaten shells, half a broken bottle, and other strange matters, were there—every one, however rude, worthy of close examination, because studded with elegant zoophytes, the tubes of serpulæ and other annelids, bright coloured pellucid ascidians, graceful nudibranch molluscs, the spawn of fishes, and endless other things. Brittle stars, by scores, were twining their long spiny arms, like wizard's tails, among the tangled mass, arrayed in the most varied and most gorgeous hues of all varieties of kaleidoscope patterns, (see plate IV.) and sand-stars not a few. The latter are much more delicate in constitution than

the former, being very difficult to keep alive, and also much more brittle; the former, notwithstanding their English name, I have not found so particularly fragile. Among other members of this wonderful class of animals, we obtained, in the course of our day's work, several of that fine but common one, the twelve-rayed sun-star, (*Solaster papposa*), a showy creature, dressed in rich scarlet livery, some eight inches in diameter. Two or three of a species usually counted rare also occurred, the bird's foot (*Palmipes membranacea*), more curious, and equally beautiful. (See plate III.) It resembles a pentagonal piece of thin leather, with the angles a little produced, and regularly pointed. The central part of this disc is scarlet, and a double line of scarlet proceeds from this to each angle, while the whole is margined by a narrow band of the same gorgeous hue. The remainder of the surface is of a pale yellow or cream colour, and covered, in the most elegant manner, with tufts of minute spines, arranged in lines which cross each other, lozenge-fashioned, near the middle of the disc, and run parallel to each other, at right angles to the margin, between the points.

"Not less attractive was another star-fish, the Eyed Cribella. (*Cribella oculata*.) It consists of five finger-like rays, tapering to a blunt point, and cleft nearly to the centre, the consistence stiffly fleshy, or almost cartilaginous. The hue of both disc and rays, or the superior surface, is a fine rosy purple. (See plate III.)

"All these are very attractive occupants of an aquarium. They are active and restless, though slow in movement, continually crawling about the rocks, and round the sides of the tank, by a gliding motion produced by the attachment and shifting of hundreds of sucker feet, which are protruded at will, through minute pores in calcareous integument. Their showy colours are exhibited to advantage on the dark rocks, around the projections and angles of which they wind their flexible bodies, now and then turning back a ray, from which the pellucid suckers are seen stretching and sprawling; and as they mount the glass, not only can their hues be admired, but the exquisite structure of their spines, and the mechanism of their suckers, can be studied at leisure.

"Every haul of the dredge brought up several univalve shells, tenanted, not by their original constructors and proprietors, but by their busy intruder, the soldier crab. (*Pagurus*.) Several species of this curious creature occurred. . . . I shall only just allude to the beautiful clock anemone, (*Adamsia palliata*), and several other species of this charming family. Long legged spider crabs, of the genera *Stenorhynchus*, *Inachus*, &c., were abundant, sprawling their slender limbs like bristles, to an unconscionable distance, tempting us to think that, if we had legs like these, we might cover the ground in a style that would put to shame the old giant slayer's seven league boots.

"But as I have said, time and space would fail me if I were to attempt an enumeration of all the objects of interest that were brought to view in the course of a good day's dredging. Mollusca, both naked and shelled, both univalve and bivalve, and crabs, prawns

and shrimps, worms, sponges, sea-weeds, all presented claims to notice, and all contributed representatives to my stock, in the successive emptyings of the dredge; for we worked pretty nearly all the way home. And when we came to bring on shore the bottles, jars, pans, pails and tubs, we found them all well tenanted with strange creatures, the greater part of which were despatched on their way to London by the same evening mail train."—*Gosse's Aquarium*, pp. 55, 58, 59, 63.

But if you cannot afford the expense of your own dredge and boat, and the time and trouble necessary to follow the occupation scientifically, yet every trawler and oyster boat will afford you a tolerable satisfaction. Go on board one of these; and while the trawl is down, spend a pleasant hour or two in talking with the simple, honest, sturdy fellows who work it, from whom (if you are as fortunate as we have been for many a year past) you may get many a moving story of danger and sorrow, as well as many a shrewd practical maxim, and often, too, a living recognition of God, and the providence of God, which will send you home, perhaps, a wiser and more genial man. And when the trawl is hauled, wait till the fish are counted out, and packed away, and then kneel down and inspect (in a pair of Mackintosh leggings, and your oldest coat) the crawling heap of shells and zoophytes which remains behind about the decks, and you will find, if a landsman, enough to occupy you for a week to come. Nay, even if it be too calm for trawling, condescend to go out in a coble, and help to haul some honest fellow's deep-sea lines and lobster-pots, and you will find more and stranger things about them than even fish or lobsters: though they, to him who has eyes to see, are strange enough.

We speak from experience; for it was but the other day that, in the north of Devon, we found sermons, not indeed in stones, but in a creature reputed among the most worthless of sea vermin. We had been lounging about all the morning on the little pier, waiting, with the rest of the village, for a trawling breeze which would not come. Two o'clock was past, and still the red mainsails of the skiffs hung motionless, and their images quivered, head downwards, in the glassy swell,

"As idle as a painted ship
Upon a painted ocean."

It was neap-tide, too, and therefore nothing could be done among the rocks. So, in despair, finding an old coast-guard friend starting for his pots, we determined to save the old man's arms, by rowing him up the shore. And as we paddled homeward, under the high green northern wall, five hundred feet of cliff furred to the water's edge with rich oak woods, against

whose base the smooth Atlantic swell died whispering, as if curling itself up to sleep at last within that sheltered nook, tired with its weary wanderings, while the sun sank lower and lower behind the deer-park point, and the white stair of houses up the glen was wrapt every moment deeper and deeper in hazy smoke and shade, as the light faded, and the evening fires were lighted one by one, and the soft murmur of the water-fall, and the pleasant laugh of children, and the splash of homeward oars, came clearer and clearer to the ear at every stroke, the recollection arose of many a brave and wise friend, whose lot was cast in no such western paradise, but rather in the infernos of this sinful earth, toiling even then amid the festering alleys of Bermondsey and Bethnal Green, to palliate death and misery which they had vainly laboured to prevent, watching the strides of that very cholera which they had been striving for years to ward off, now re-admitted, in spite of all their warnings, by the carelessness, and laziness, and greed, of sinful man. And as we thought over the whole hapless question of sanatory reform, proved long since a moral duty to God and man, possible, easy, even pecuniarily profitable, and yet left undone; there seemed to us a sublime irony, most humbling to man, in some of Nature's processes, and in the silent and unobtrusive perfection with which she has been taught to anticipate, since the foundation of the world, some of the loftiest discoveries of modern science, and which we are too apt to boast, as if we had created the method by discovering its possibility. Created it? Alas for the pride of human genius, and the autotheism which would make man the measure of all things, and the centre of the universe! All the invaluable laws and methods of sanatory reform at best are but clumsy imitations of the unseen wonders which every animalcule and leaf have been working since the world's foundation, with this slight difference between them and us, that they fulfil their appointed task, and we do not. The sickly geranium which spreads its blanched leaves against the cellar panes, and peers up, as if imploringly, to the narrow slip of sunlight at the top of the narrow wynd, had it a voice, could tell more truly than ever a doctor in the town, why little Maggie sickened of the scarlatina, and little Jocky of the hooping-cough, till the toddling wee things who used to pet and water it were carried off each and all of them one by one to the kirk-yard sleep, while the father and mother sat at home, trying to supply by whisky the very vital energy which fresh air and pure water, and the balmy breath of woods and heaths, were made by God to give; and how the little geranium did its best, like a heaven-sent angel, to right the wrong which man's ignorance had begotten, and drank in, day by day, the poisoned atmos-

phere, and formed it into fair green leaves, and breathed into the children's faces, from every pore, whenever they bent over it, the life-giving oxygen for which their dulled blood and festered lungs were craving, but in vain; fulfilling God's will itself, though man would not, and was too careless or too covetous to see, after six thousand years of boasted progress, why God had covered the earth with grass, herb, and tree, a living and life-giving garment of perpetual health and youth.

It is too sad to think long about, lest we become very Heraclituses. Let us take the other side of the matter with Democritus, try to laugh man out of a little of his boastful ignorance and self-satisfied clumsiness, and tell him, that if the House of Commons would but summon one of the little Paramecia from any Thames' sewer-mouth, to give his evidence before their next Cholera Committee, sanatory blue-books, invaluable as they are, would be superseded for ever and a day, and Sir William Molesworth would no longer have to confess, as he did the other day, that he knew of no means of stopping the smells which were driving the members out of the House, and the judges out of Westminster Hall.

Nay, in the boat at that minute, silent and neglected, sat a fellow-passenger, who was a greater adept at removing nuisances than the whole Board of Health put together, and who had done his work, too, with a cheapness unparalleled; for all his good deeds had not as yet cost the State one penny. True, he lived by his business: so do other inspectors of nuisances: but nature, instead of paying Maia Squinado, Esquire, some five hundred pounds sterling per annum for his labour, has continued, with a sublime simplicity of economy which Mr. Hume may envy and admire afar off, to make him do his work gratis, by giving him the nuisances as his perquisites, and teaching how to eat them. Certainly, (without going the length of the Caribs, who uphold Cannibalism because, they say, it makes war cheap, and precludes entirely the need of a commissariat,) this cardinal virtue of cheapness ought to make Squinado an interesting object in the eyes of the present generation, especially as he is at this moment a true sanatory martyr, having, like many of his human fellow-workers, got into a fearful scrape by meddling with those existing interests, and "vested rights which are but vested wrongs," which have proved fatal already to more than one Board of Health. For last night, as he was sitting quietly under a stone in four fathoms water, he became aware (whether by sight, smell, or that mysterious sixth sense, to us unknown, which seems to reside in his delicate feelers) of a palpable nuisance somewhere in the neighbourhood; and, like a trusty servant of the public, turned out of his bed instantly,

and went in search, till he discovered hanging among what he judged to be the stems of tangle, (*Laminaria*,) three or four large pieces of stale thornback, of most evil savour, and highly prejudicial to the purity of the sea, and the health of the neighbouring herrings. Happy Squinado! He needed not to discover the limits of his authority, to consult any lengthy Nuisances Removal Act, with its clauses and counter-clauses, and exceptions, and explanations of interpretations, and interpretations of explanations. Nature, who can afford to be arbitrary, because she is perfect, and to give her servants irresponsible powers, because she has trained them to their work, had bestowed on him and on his forefathers, as general health inspectors, those very summary powers of entrance and removal in the watery realms, for which common sense, public opinion, and private philanthropy, are still entreating vainly in the terrestrial realms; and finding a hole, in he went, and began to remove the nuisance, without "waiting twenty-four hours," "laying an information," "serving a notice," or any other vain delay. The evil was there,—and there it should not stay; so having neither cart nor barrow, he just began putting it into his stomach, and in the meanwhile, set his assistants to work likewise. For suppose not, gentle reader, that Squinado went alone; in his train were more than a hundred thousand as good as he, each in his office, and as cheaply paid; who needed no cumbrous baggage train of force-pumps, hose, chloride of lime packets, whitewash pails or brushes, but were every man his own instrument; and to save expense of transit, just grew on Squinado's back. Do you doubt the assertion? Then lift him up hither, and putting him gently into that shallow jar of salt-water, look at him through the hand-magnifier, and see how nature is *maxima in minimis*.

There he sits, twiddling his feelers, (a substitute with crustacea for biting their nails when they are puzzled,) and by no means lovely to look on in vulgar eyes. About the bigness of a man's fist, a round-bodied, spindle-shanked, crusty, prickly, dirty fellow, with a villanous squint, too, in those little bony eyes which never look for a moment both the same way. Never mind: many a man of genius is ungainly enough; and nature, if you will observe, as if to make up to him for his uncomeliness, has arrayed him as Solomon in all his glory never was arrayed, and so fulfilled one of the few rational proposals of old Fourier, that scavengers, chimney-sweeps, and other workers in disgusting employments, should be rewarded for their self-sacrifice in behalf of the public weal by some peculiar badge of honour, or laurel crown. Not that his crown, like those of the old Greek games, is a mere useless badge; on the contrary, his robe of state is composed of his fellow-servants. His whole back is

covered with a little grey forest of branching hairs, fine as the spider's web, each branchlet carrying its little pearly ringed club, each club its rose-crowned polype, like (to quote Mr. Gosse's comparison) the unexpanded buds of the acacia.*

On that leg grows, amid another copse of the grey polypes, a delicate straw-coloured Sertularia, branch on branch of tiny double combs, each tooth of the comb being a tube containing a living flower; on another leg another Sertularia, coarser, but still beautiful; and round it again has trained itself, parasitic on the parasite, plant upon plant of glass ivy, bearing crystal bells,† each of which, too, protrudes its living flower; on another leg is a fresh species, like a little heather-bush of whitest ivory,‡ and every needle leaf a polype cell—let us stop before the imagination grows dizzy with the contemplation of those myriads of beautiful atomies. And what is their use? Each living flower, each polype mouth is feeding fast, sweeping into itself, by the perpetual currents caused by the delicate fringes upon its rays, (so minute these last, that their motion only betrays their presence,) each tiniest atom of decaying matter in the surrounding water, to convert it, by some wondrous alchemy, into fresh cells and buds, and either build up a fresh branch in the thousand-tenanted tree, or form an egg-cell, from whence when ripe may issue, not a fixed zoophyte, but a free swimming animal.

And in the meanwhile, among this animal forest, grows a vegetable one of delicatest sea-weeds, green and brown and crimson, whose office is, by their everlasting breath, to reoxygenate the impure water, and render it fit once more to be breathed by the higher animals who swim or creep around.

Mystery of mysteries! We can jest no more—Heaven forgive us if we have jested too much on so simple a matter as that poor spider-crab, taken out of the lobster-pots, and left to die at the bottom of the boat, because his more aristocratic cousins of the blue and purple armour will not enter the trap while he is within. •

We are not aware whether the surmise, that these tiny zoophytes help to purify the water by exhaling oxygen gas, has yet been verified. The infusorial animalcules do so, reversing the functions of animal life, and instead of evolving carbonic acid gas, as other animals do, evolve pure oxygen. So, at least, says Liebig, who states that he found a small piece of match-wood, just extinguished, burst out again into a flame on being immersed in the bubbles given out by these living atomies.

We ourselves should be inclined to doubt that this is the case with zoophytes, having found water in which they were growing

* *Coryne Ramosa.*

† *Campanularia Integra.*

‡ *Crisidia Eburnea.*

(unless, of course, sea-weeds were present) to be peculiarly ready to become foul : but it is difficult to say whether this is owing to their deoxygenating the water while alive, like other animals, or to the fact that it is very rare to get a specimen of zoophyte in which a large number of the polypes have not been killed in the transit home, or at least so far knocked about, that (in the Anthozoa, which are far the most abundant) the polype—or rather living mouth, for it is little more—is thrown off to decay, pending the growth of a fresh one in the same cell.

But all the sea-weeds, in common with other vegetables, perform this function continually, and thus maintain the water in which they grew in a state fit to support animal life.

This fact, first advanced by Priestley and Ingenhousz, and though doubted by the great Ellis, satisfactorily ascertained by Professor Daubeny, Mr. Ward, Dr. Johnston, and Mr. Warington, enables us to answer the question, which we hope has ere now arisen in the minds of some of our readers.—

How is it possible to see these wonders at home? Beautiful and instructive as they may be, they can be meant for none but dwellers by the sea-side; and even to them, the glories of the water-world must always be more momentary than those of the rainbow, a mere *Fata Morgana*, which breaks up and vanishes before our eyes. If there were but some method of making a miniature sea-world for a few days; much more of keeping one with us when far inland!

This desideratum has at last been filled up; and science has shewn, as usual, that by simply obeying nature we may conquer her, even so far as to have our miniature sea, of artificial salt-water, filled with living plants and sea-weeds, maintaining each other in perfect health, and each following, as far as is possible in a confined space, its natural habits.

To Dr. Johnston is due, as far as is known, the honour of the first accomplishment of this, as of a hundred other zoological triumphs. As early as 1842, he proved to himself the vegetable nature of the common pink coralline, which fringes every rock-pool, by keeping it for eight weeks in unchanged salt-water, without any putrefaction ensuing. The ground, of course, on which the proof rested in this case was, that if the coralline were, as had often been thought, a zoophyte, the water would become corrupt, and poisonous to the life of the small animals in the same jar; and that its remaining fresh argued that the coralline had reoxygenated it from time to time, and was therefore a vegetable.

In 1850, Mr. Robert Warington communicated to the Chemical Society the results of a year's experiments, "On the Adjustment of the Relations between the Animal and Vegetable

Kingdoms, by which the vital functions of both are permanently maintained." The law which his experiments verified was the same as that on which Mr. Ward, in 1842, founded his invaluable proposal for increasing the purity of the air in large towns, by planting trees, and cultivating flowers in rooms, *that the animal and vegetable respirations might counterbalance each other*, the animal's blood being purified by the oxygen given off by the plants, the plants fed by the carbonic acid breathed out by the animals.

On the same principle, Mr. Warrington first kept, for many months, in a vase of unchanged water, two small gold fish and a plant of *Vallisneria spiralis*; and two years afterwards began a similar experiment with sea-water, weeds, and anemones, which were, at last, as successful as the former ones. Mr. Gosse had, in the meanwhile, with tolerable success, begun a similar method, unaware of what Mr. Warrington had done; and now the beautiful and curious exhibition of fresh and salt-water tanks, opened last year in the Zoological Gardens in London, bids fair to be copied in every similar institution, and we hope in many private houses, throughout the kingdoms.

To this subject Mr. Gosse's last book, "The Aquarium," is principally devoted, though it contains, besides, sketches of coast scenery, in his usual charming style, and descriptions of rare sea-animals, with wise and godly reflections thereon. One great object of interest in the book is the last chapter, which treats full of the making and stocking these salt-water "Aquaria," and the various beautifully coloured plates, which are, as it were, sketches from the interior of tanks, well-fitted to excite the ambition of all readers, to possess such gorgeous living pictures, if as nothing else, still as drawing-room ornaments, flower-gardens which never wither, fairy lakes of perpetual calm, which no storm blackens,—

οὐτ' ἐν Νέγει, οὐτ' ἐν ὁπώραν.

Those who have never seen one of them can never imagine (and neither Mr. Gosse's pencil nor our clumsy words can ever describe to them) the gorgeous colouring and the grace and delicacy of form which these subaqueous landscapes exhibit.

As for colouring,—the only bit of colour which we can remember even faintly resembling them, (for though Corregio's Magdalene may rival them in greens and blues, yet even he has no such crimsons and purples,) is the Adoration of the Shepherds, by that "prince of chlorists," Palma Vecchio, which hangs on the left-hand side of Lord Ellesmere's great gallery. But as for the forms,—where shall we see their like? Where, amid miniature forests as fantastic as those of the tropics, animals

whose shapes outvie the wildest dreams of the old German ghost painters, which cover the walls of the galleries of Brussels or Antwerp? And yet the uncouthest has some quaint beauty of its own, while most—the star-fishes and anemones, for example—are nothing but beauty. The well coloured plates in Mr. Gosse's "*Aquarium*" give, after all, but a meagre picture of the reality, as it may be seen either in his study, or in the tank-house at the Zoological Gardens; and as it may be seen also, by any one who will follow carefully the directions given at the end of his book, stock a glass vase with such common things as they may find in an hour's search at low-tide, behind Musselburgh pier, and so have an opportunity of seeing how truly Mr. Gosse says, in his valuable preface, that—

"The habits" (and he might well have added, the marvellous beauty) "of animals, will never be thoroughly known till they are observed in detail. Nor is it sufficient to mark them with attention now and then; they must be closely watched, their various actions carefully noted, their behaviour under different circumstances, and especially those movements which seem to us mere vagaries, undirected by any suggestible motive or cause, well examined. A rich fruit of result, often new and curious and unexpected, will, I am sure, reward any one who studies living animals in this way. The most interesting parts, by far, of published Natural History, are those minute, but graphic particulars, which have been gathered up by an attentive watching of individual animals."

Mr. Gosse's own books, certainly, give proof enough of this. We need only direct the reader to his exquisitely humorous account of the ways and works of a captive soldier-crab,* to shew them how much there is to be seen, and how full nature is also of that ludicrous element of which we spoke above. And, indeed, it is this form of Natural History, not mere classification and the finding out of names, and quarrellings as to the first discovery of that beetle or this butter-cup,—too common, alas! among mere closet-collectors,—"*endless genealogies*," to apply St. Paul's words by no means irreverently or fancifully, "*which do but gender strife*;" not in these pedantries is that normal training to be found, for which we have been lauding the study of Natural History: but in healthful walks and voyages out of door, and in careful and patient watching of the living animals and plants at home, with an observation sharpened by practice, and a temper calmed by the continual practice of the naturalist's first virtues—patience and perseverance.

It is hardly fair to close this article, devoted as it has been almost entirely to the "*Wonders of the Sea-Shore*," without

giving a list of books which may help young people to teach themselves somewhat at least, of other branches of natural history.

For Geology, we need hardly say that we know no better books than Mr. Hugh Miller's; for though his "*Old Red Sandstone*" is devoted to one set of strata only, yet it is better to teach the young how to observe thoroughly one set of phenomena, than how to know a little about a thousand. By making himself perfect master of one subject, has Mr. Miller attained his eminence. And by trying to do the same, and so to behold the universal, where alone it can be rightly seen, in the particular, will the young student fit himself for wider spheres of observation. But for a book of general conclusions in Geology, we know none at all equal to the little one by Professor Anstey, of King's College, London.

For Botany, we should recommend the Rev. C. A. John's "*Week at the Lizard*," on the very same grounds that we do Mr. Miller's "*Old Red Sandstone*;" and for a book of reference for names and classes, his "*Flowers of the Field*," published by the Society for the Promotion of Christian Knowledge, as the best and cheapest hand-book which we have.

For Microscopic wonders, Miss Agnes Catlow's little works will give the young abundance; and for Physical Geography, Guyot's "*Earth and Man*," and Miss Rosina Zornlin's little introductory work, will tell them all they need know, and far more than they will recollect.

For Ornithology, there is no book, after all, like dear old Bewick, *passé* as he may be, in a strictly scientific point of view; and Mr. St. John's "*Wild Sports of the North*," and "*Tour in Sutherlandshire*," are the monographs of a sportsman, a gentleman, and a naturalist, which remind us at every page (and what higher praise can we give?) of White's "*History of Selbourne*;" as do also Mr. Knox's "*Birds of Sussex*."

These three little books, with Mr. Gosse's "*Canadian Naturalist*," ought to be in the hands of every lad who has the least chance (as thousands have) of passing his manhood in Canada or South Africa, India or Australia.

And so we end our article, heartily wishing that it may send out a few fresh labourers into a field, which we know from experience to be as full of health and happiness, as it is inexhaustible in fertility, and beauty, and the glory of Him whose name is Love.

ART. II.—*Report of Twenty-one Years' Experience of the Dick Bequest, for Elevating the Character and Position of the Parochial Schools and Schoolmasters in the Counties of Aberdeen, Banff, and Moray.* Presented to the Trustees, by ALLAN MENZIES, Writer to the Signet, Professor of Conveyancing in the University of Edinburgh, Clerk to the Trustees. Edinburgh, 1851.

WE were taught, in our younger days, that Scotland was the model country of the world in matters of popular education. In this, as in a thousand other good old-fashioned opinions, our prejudices have received of late a severe shock. And yet we are much disposed, in spite of all recent disclosures, to adhere in the main to the old opinion, that the Scotch are, upon the whole, better educated than any other people of Europe. Certainly, if you meet a Scottish lowland peasant in the centre of England, and enter into conversation with him, you very soon discover, as a general rule, that you have a vastly more intelligent man to deal with than you can expect to find in the worthy but dull smock-frocked race around you. The lower orders of Scotland have their faults—very obvious and great faults—but, speaking of the nation generally, want of intelligence and mental cultivation is not as yet to be reckoned in the list. It may, however, be quite consistent with this, that the country is in a transition state—the old national character may be undergoing a rapid change—and it may be quite true that, unless evils which now exist are effectually checked, Scotland will have lost her high position before another generation has grown to manhood.

The ideal character of the Scottish lower orders is taken from the Lowland rural population: but these are very far, indeed, from being the whole of the Scottish people. It was too long the custom to look at the wild districts of Scotland, inhabited by the Gael, as an unknown savage region, which might well be left out of the account: and late years have peopled all the large Scottish, like the English, towns, with another barbarous race of Celts, who bring all their squalid habits with them across the sea, and make the Gorbals or the Cowgate merely a second edition of Skibbarreen. These last poor creatures have also, it must be remembered, a wretched power of dragging down the indigenous poor of every town in which they settle to the level of their own degradation. And, besides the two fertile causes of degeneracy thus furnished from the Highlands and from Ireland, Scotland, like every other

country where manufactures are flourishing, must gather around its centres of industry a teeming population, which it is far beyond the power of the old established religious and educational machinery to teach. Thus Scotland may be in a very critical position at home, though the present race of Scotchmen still maintain their high character abroad; and we fully believe it is necessary to take immediate steps to meet the growing evil before it becomes so great as to be past remedy. We trust it is not national vanity which makes us feel that, not Scotland only, or the United Kingdom, but the whole world would suffer, if, before another fifty years have passed, the old Scottish character were to become extinct.

Now we have heard a great deal of late as to Scottish education. The Coalition Ministry, anxious to establish some general system of education, selected Scotland, not we hope as the *corpus vile* on which to experiment, but rather as the healthy subject in which they might, without danger, see how their treatment acted, before they adopted it in their general practice. Perhaps Lord John Russell thought that, as differences of religious belief present the great difficulty in the way of the adoption of any national system of education—and as there appears to Englishmen to be really no serious difference of belief on any point of importance amongst the Protestant poor of Scotland—that therefore he would find it comparatively an easy task to bring their teachers to accord: he forgot, perhaps, that often the less people have to differ about the more inveterate is their disagreement. Whatever was the cause of failure, the well-intended Ministerial Bill failed; but no one will say the attempt has not done good, if it has awakened the attention of Parliament, and of the United Kingdom, to the fact, that in Scotland, as well as in England, in matters of education, there is pressing necessity for an immediate vigorous move.

Sir J. K. Shuttleworth* has brought forward, in a condensed form, statistics which, whether his calculations based on them be accurate or no, must be taken to prove that it will never do to leave matters as they are. He tells us, on the authority of the evidence† of 1845, that in the Highlands, out of a population of 500,000, there were then about 80,000 above the age of six years who could not read. The Highland parishes are of vast extent; and in them the parish school system must have little power. The parish, for example, of Small Isles, it is stated in the same evidence, consists of four large islands, detached and separated by arms of the sea, and though there is a

* Public Education, 1853, pp. 342, 348.

† Cf. Evidence of Dr. Norman Macleod, as quoted by Sir J. K. Shuttleworth.

considerable population in each of these islands, they have but one parish school. Again, in the extensive parish of Jura, we are told is included the island of Colonsay, distant from it forty miles. The parish church and school are in the island of Jura—there is also included in the parish a slate island, with a very considerable population, and the island of Shuna as well as the island of Scarba; all of which are, of course, completely separated from the parish church and school. To meet the evil of such separations, the salaries of the parish schoolmasters have been allowed by Act of Parliament to be divided, that means may be supplied for maintaining in a parish more than one school: the result has been miserable; *e.g.*, at Colonsay, it is stated in the same evidence, the master has £11 a-year, and at Jura £14, while the remainder of the united salary is frittered away in sums of £2, £3, and £4, amongst other teachers. The school fees amongst the impoverished population of these districts are of no account. In some of the islands the teachers dismiss their boys when they please, and go to the herring-fishery; and they make more money by a few nights' fishing than by six months' school-keeping. Some of the school-houses in such situations are described as wretched hovels—the water trickling down from the imperfectly thatched roof, the children taking refuge in a corner as shelter from the rain, or gathering round the peat-fire in the middle of the room, while the smoke finds its way through the crannies in the wall, which is often built of wet rough stones, put together without mortar, as they are tumbled from the quarry, and freely admitting the weather, except where the holes are stuffed up with moss. Both the religious communions of Scotland and individuals have, no doubt, made great exertions since 1845, to meet the evils incident to this rude state of society; but the disease must baffle their power. In such wild districts we might expect a bad state of things; but Sir James Shuttleworth tells us, on the authority of evidence which he adduces,* that Lowland schools have been often found quite as bad. In the most populous, and the least populous districts, where the endowed school cannot suffice for the growing population, or where the distance to be traversed before it can be reached is too great to allow children to frequent it, we find the chief field of what are called the *adventure* schools. A description is given to enable us to judge of what some of these were found to be in the presbyteries of Chirnside, Dunse, and Lauder, and we have such particulars as the following:—In one school the dwelling-house of the master consisted of one apartment 15 feet by 12. The apartment in which another of

* *Vide* p. 354, where Mr. Gordon and Mr. Gibson are quoted.

these schools was taught was originally a hayloft: the lower story, when the school was visited, was used as a stable. The apartment in which another school was taught was 11 feet by 6, the height $7\frac{1}{2}$ feet. Another was an old stable. In another the master, who had on an average 45 pupils, had not realized, during the year preceding the inspector's visit, more than £3, 10s. from fees—having no other salary to depend on—and between October and April, only 1s. of fees had been paid; so that he had been compelled, in order to obtain a maintenance, to open a small grocery shop.

In the parish schools it has only been by a great struggle that the education given has kept pace with the improved standard of the age. The stipends of the masters have been hitherto far below what the nature of the duties demands. The masters of the parochial schools are generally superior to any other class of teachers of schools for the poor in Scotland; but still, the parochial schools have, in many places, languished under the many discouraging difficulties to which they have been exposed; and what is worse still, the national legal endowment for the education of the poor, as is well known, does not extend to the burgh towns. The parish schools are for rural districts only. In the towns, therefore, the hotbeds of crime, a mass of ignorance and wickedness is growing up, which threatens to overflow the land.

From the accounts of juvenile depravity in the large towns, and of the dark and ignorant state of parts of the Highlands, no doubt can exist that there is a vast multitude of children in Scotland, as in England, who are not in attendance on any school.* We must not quote Sir J. K. Shuttleworth's calculations of the number of children left uneducated in Scotland, for very trustworthy authorities look upon his statements in this matter as by no means doing justice to the efficiency of the existing system. Indeed there seems little doubt, from the census returns, agreeing as they do in this respect, with other sources of information, that the calculation he has made of the deficiency of education throughout Scotland, *taken as a whole*, gives an exaggerated picture. The Report of the Education Committee of the General Assembly of the Established Church, published this year,† while it urges that, so far as the Committee's inquiries have extended, the proportion of children

* Calculations of general averages as to the number of children receiving education throughout a whole county, are not of much use for our present purpose. If there be thousands growing up in our large towns, *e. g.*, without any instruction, this evil is not met by the fact that more than the usual proportion are being well educated in other districts.

† The Report of the Educational Committee for 1853, p. 20, calculates the number of scholars enrolled, at all schools in Scotland, as about 1 in 7.5 of the population.

receiving instruction is much more satisfactory than had been commonly asserted, still admits a serious deficiency of attendance. It is of little use to dispute as to statistics which must be more or less conjectural; neither is it worth while wrangling whether Scotland be in this respect in a more prosperous state than other countries. All are agreed that the deficiency in many parts of Scotland is very great and alarming; and the Lord Advocate's measure of last session will not have been introduced in vain, if it rivets attention on this fact.

We take it for granted, then, that energetic measures to remedy this evil are but postponed; and we trust they will not be postponed long. Meanwhile, perhaps we may do some good service, if we take advantage of the delay, to remind all concerned, that, though much improvement cannot be looked for without aid from Government, Government measures, even though sanctioned by an unanimous Parliament, must be powerless of themselves. All that a Government can do is to construct the machinery of education. Whether education is to be good or no must depend, not on lifeless machinery, but on a living power.*

In illustration of this truth we would call attention to the state of the fairly remunerated manufacturing population of Scotland. A Scotchman may be an intelligent man, and yet be one of the most offensive specimens of humanity. Setting the wild districts of the Highlands out of consideration, and the still more savage districts of the neglected Wynd-, we are bold to assert, that a great deal of the most precious part of education is wanting in the shrewd, well informed, and well paid class of the Scottish manufacturing poor.† It is not enough to congratulate ourselves that all these persons can read, and most of them show their reading by using, in their ordinary conversation, as many long words as if they wished to impress their hearers with the idea that they had taken an University Degree—that they are well informed enough in matters of science, connected with their trade, know something of general history, and are particularly alive to the politics of the day,—a man may be all this, and have made very little progress in real education. If education is really good, it must refine, and it must make a man

* We refrain from entering on the difficult question, how a degraded population are to be induced to avail themselves of the means of education, when adequately provided. It seems more important to insist now on the duty of striving to make such education as we have really good. It is possible to have a great deal of educational machinery, and little real education.

† We may remark, by the way, that the attention paid to schooling in the lowland parts of Scotland surely might have been expected, before now, to have introduced greater attention to cleanliness and neatness in the dwellings of the Scottish poor.

humble, in the best sense of the word, that is, conscious that, though he strives to learn daily, he knows, after all, very little. Now in these two qualities, refinement and true humility, the Scottish manufacturing poor are certainly not pre-eminent. Sometimes, when we have been thrown in their way, and have witnessed their innate vulgarity and rudeness, while we heard their sententious prating, we have even sighed for the dull, simple, well-mannered labourers of many a remote English village, whose weekly instruction from the pulpit had to be meted out in the simplest Saxon words and the shortest sentences, before there could be any hope of its finding its way to their comprehension. We have the same evil, of a hard-unlovely intelligence springing up amongst the manufacturing population in England and elsewhere—what Tories would characterize as a sort of American civilisation—such as hard-headed working men may hew out for themselves, apart from all those humanizing influences which may descend upon them through a good system of comprehensive education, from intercourse with men of more religious and more cultivated minds. But nowhere are the faults of such persons exhibited in so intolerable a form as in Scotland. An intelligent Scotchman, who has had no softening influences brought to bear on him, is a very hard and vulgar specimen. Douce David Deans, without his religious feelings, would be found to be made of very stubborn stuff. Self-conceit, quite as much as caution, is a strongly developed organ in the Scottish head, and, if we may speak of such a matter in the language of comparison, we should say, that the Scotch, more than any other nation, require to have their natural faults chastened by religion, before they can produce a fine character. The same thing is true of them morally as intellectually. They have latent within them veins of the noblest feeling, which, if developed, will counteract all their natural faults. But it is only when united with the product of these feelings that those other natural qualities can be purified and perfected, which otherwise are not loveable, however they may denote power. A Scottish intellect is very harsh, unless it be mellowed by something drawn from those depths of poetical and enthusiastic sentiment, which the noblest periods of the national history have shewn to lie in Scottish hearts. Looking at the matter merely intellectually, there is no people that more needs to have its poetical and religious training cared for. Looking at the matter religiously, even the best moral qualities of the Scot—his proper self-reliance, and his persevering boldness—very much require to be softened by a reverential regard to the things of God.

Now, perhaps, the most valuable parts of the book which lies before us—the Report of the Dick Bequest—are those chapters

which contain general suggestions for the guidance of the schoolmaster as to the improvement of education in those matters which he only can improve. It is only through the teacher that life can be breathed into the machinery of teaching. Government may establish its system, and may help us to find the men to work it; but it cannot make the men at first, nor keep them alive, energetic, and large-hearted, in spite of all the depressing drudgery of their work. The community is much indebted to the Trustees of the Dick Bequest, and especially to their able secretary, Professor Menzies, for the boon they have conferred on Scottish schoolmasters, by the suggestions contained in this volume. The Report before us is divided into two parts,—the first containing an account of the Dick Bequest, and its management,—the second setting forth, as it were, the ideal of the Scottish Parish School. And Professor Menzies tells us, in a prefatory note, that —

“In preparing the second part, he was influenced by the desire to place before the schoolmasters, and especially before those recently appointed, or who shall be elected in future, correct views of the great and responsible duties of their office; and that, in furtherance of this design, and in order to render the statement more authoritative and impressive, he had been induced to refer to the opinions and practice of Dr. Arnold, and of other eminent authors and instructors, more fully than would have been requisite had there been reason to suppose that the works of those writers were generally or readily accessible to those for whose use this Report is chiefly intended.”

He will have done a real service to his country if he succeeds in breathing into its education somewhat of the spirit of the great man by whom he thus invites its teachers to be led.

But before we examine the valuable suggestions thus made, it will be well to explain what the Dick Bequest is. Professor Menzies has, we think, acted wisely in giving us some account of Mr. Dick himself, preparatory to the history of the working of his Bequest. A retired West India storekeeper, who had lived for many years very quietly in a modest house in Artillery Place, Finsbury, died in 1828, and, having provided by legacies for his only daughter and her family, left the bulk of his property to the maintenance and assistance of the Country Parochial Schoolmasters, in his native counties of Elgin and Moray, and in the neighbouring counties of Banff and Aberdeen. From the days of George Heriot downwards, it has been very common for Scotchmen who have made their fortunes, to settle them at their deaths on trustees, to be used for some public purposes. Englishmen may require to be told that the Scottish law calls such bequests mortifications, perhaps, as Sir Walter

Scott we think has suggested, not without a sly allusion to the disappointment of relatives, quite as much as in reference to the property being held in mortmain : Many of such mortifications have an educational object. A Scotchman, who has had a good deal of trouble in making his money, does not quite like to lose his hold over it at his death : he has used it himself, after he made it, very prudently ; and he does not like that it shall be spent when he is gone in mere eating and drinking and enjoyment. Mr. James Dick may fairly enough have thought, that, if he left his £100,000 to a grandson, very probably in a few years, after all the trouble he had taken in getting it together, it might produce no great benefit to his country : and that before this date it might have fallen into the hands of some young gentleman whom he had never seen, who, brought up to look upon himself from childhood as a favoured son of fortune, might have spent all he could of it in horse-racing and his wine-merchants' bills, and might have felt somewhat ashamed of the old quiz in the nankeen breeches and cocked hat and large shoe-buckles, graphically described in the preface to the Report, whose picture, hanging in their friend's hall, his companions might have been accustomed heartily to laugh at, as shewing that the Dicks of that ilk, of whose antiquity their friend was fond of boasting, were after all nothing very great in their origin, and that all their money had sprung from the disreputable source of honest industry. Mr. Dick thought the money would be more likely to do good if he made the parish schoolmasters of his native land his heirs ; and, judging from the result set before us in this volume, he seems to have thought rightly. The Trustees are the Keeper and Deputy-Keeper of the Signet in Scotland, the Treasurer of the Society of Writers to the Signet, and eight Commissioners, chosen by and from that respectable body. With the Marquis of Dalhousie at their head, taking an active interest in their proceedings before he went to India, and with many names well known in Scotland on their list, the Trustees of the Dick Bequest seem to have performed their duty with great judgment. Avoiding the danger which would have arisen from distributing the fund at their disposal on mere eleemosynary principles, whereby it would have become an encouragement to improvidence, they have given great prominence to that part of the Testator's will, which directed his Trustees to dispose of the income in such manner as "shall seem most likely to encourage active schoolmasters, and gradually elevate the literary character of the parochial schoolmasters and schools." With the view of more effectually carrying out this object, the Trustees have lately, on the vacancy of the treasurership, united that office with the secretaryship,

and appointed, instead of a new treasurer, a separate officer, whose distinct duty it will be to inspect their schools; and for the last fourteen years they have held regular examinations of schoolmasters, now conducted by three eminent University Professors, whose services they have secured. Thus the name of Mr. James Dick, though he could hardly have foreseen his elevation, must take its place with that of Lord Lansdowne and Lord John Russell, as one of the originators of that system of diligent inspection of schools, and examination of schoolmasters, to ascertain their attainments in literature and science, and of encouragement of private efforts for the improvement of education by public grants, made proportionate to the amount of private exertion, which promises very speedily to change the whole face of society in the United Kingdom, and, with God's blessing, to confer the most lasting benefits on the coming generation. The Lord President of the Council, when he reads, as in duty bound, the volume now before us, may almost fear an *imperium in imperio*; for obviously Mr. Dick's Trustees have, for these three northern counties, become a second Education Committee of the Privy Council, and their Report for 1854 may well prove a dangerous rival in popularity and usefulness to Sir James K. Shuttleworth's statement of his experience of the results of "Public Education from 1846 to 1852."

Now this account of the nature of the Bequest, besides being necessary that we may understand what follows in this volume, has an important moral for our day. Some of those who are loudest in calling out that Government ought to take up more vigorously the subject of a general national system of education, are apt to devolve all duty in this matter upon the Government. They forget that in this, as in all other great measures, Government is powerless unless seconded by the zeal of individuals. It is not indeed everybody who, like Mr. Dick, has a large fortune to leave for such purposes, nor should we recommend all grandchildren to be treated as Mr. Dick's were; but perhaps it would be well, if some of those who call themselves pre-eminently the friends of education, were either by their last will and testament, or still better by exercising self-denial while they are still alive, to devote some considerable sums for the carrying out of such schemes as they think likely to make education advance on good principles. We have no weakness for praising the old days that are past, and think it likely that many most useful endowments of old times originated from very mixed if not blameable motives in their founders. But still, in England at least, it does certainly at times give us pain to compare the niggardliness of late with the liberality of the old mediæval centuries, in the foundation of great houses of learn-

ing which have been nurseries of sound education for many ages; and which, amid the changes of our own fluctuating times, are still revered by those who have been privileged to be trained within their walls, as the quiet homes in which their youth was taught a higher wisdom and nobler views of society, than they could ever have gained from the tear and wear of a common worldly life. Scotland, indeed, is the last country in the United Kingdom which ought to be reproached with the paucity of its "founders and benefactors" in Protestant times. But a large proportion of the many Scottish educational hospitals, as they are called, and other such charities, which have been founded in comparatively late years, have been dedicated chiefly to the education of the middle class. We shall be glad to see the number of persons every year increase who, we do not say by bequests at their death, but rather by disinterested exertions while living, devote the superfluity of their wealth, that they may originate and give stability to institutions for maintaining and improving the sound religious education of the poor.

The Report of the Dick Bequest is encouraging and useful for the guidance of persons thus liberally disposed. If a man has money to leave at his death for such purposes, this volume shews, that, if he selects his trustees well, there is good hope for sound principles being now-a-days brought to bear on the administration of his charity. In England, if local trustees are incompetent, what may we not now hope from the money held in mortmain appropriated to educational purposes, when the Charity Commissioners shall have got thoroughly to work, and each charity, however stupid its local governors, shall be regulated by the supervision of a central board of intelligent men. The object of the establishment of the Charity Commission in England, with the Lord President of the Council at its head, has been, as far as the thing is possible, to make every charity subject to such influences as have regulated the Dick Bequest. There is much encouragement here for future Founders in England; and in the general reformation, Scottish charities are not likely to be long overlooked.

But, moreover, all trustees of existing or future charities for the education of the poor, and all persons who intend in their lifetime to devote a portion of their yearly revenue to this good work, may learn another lesson from the Report of this Bequest. There is no way in which they will so effectively use the funds they have to dispose of, as by acting in unison with and striving to improve any general educational machinery which the State maintains. One of the great merits of the Dick Bequest is to be found in the way in which it has been made to fit into the

already existing machinery of the parochial schools. Local efforts have little power when they are desultory. He who would really benefit his country in such matters, must be ready to work with others, and according to a general plan.

And now it is time to consider some of the general principles, with reference to the right guidance of all education, which the perusal of this book suggests to us. The writer of the Report seems to have kept wonderfully clear of the disputed questions which so much agitate Scottish society; and we intend, in the few remarks we have to offer, to follow this good example. On the quicksands of these disputes the Lord Advocate's Bill of last session foundered; we trust that the same difficulty will not always be in the way. We trust that Scottish society will, before long, be imbued with a more truly catholic spirit than that which unfortunately prevails at present. If men think more of the interests of the Establishment or the Free Church than they do of Christianity, or the interests of their common country, there is no hope of their being brought to approach the subject in a spirit of Christian conciliation. But is it too much to expect that Scottish goodness, and even Scottish common sense, may rise superior to the wretched bickerings which now keep good and earnest men apart? All thoughtful Scotchmen are agreed, that education, to be good, must be religious. Surely the different religious parties into which the country is split will soon make an effort to devise some plan, according to which, where there is no real religious difference of any consequence between them, they will agree in educating their children together, and where there is a real important difference, they will at least agree to differ, and help each other to educate their children satisfactorily apart. When we see, for example, the comprehensiveness of the great national Church of England, and the way in which earnest men can practically act together in its ministrations, notwithstanding many serious differences of opinion, it seems preposterous to say, that one common system of religious education cannot be devised to include the great mass of the Protestant poor of Scotland, amongst whom, in comparing other Presbyterian denominations with the Establishment, there is positively nothing analogous to the differences of belief and sentiment which in England separate Dissenters and the Established Church. The Roman Catholics may demand separate schools, and the Scottish Episcopal Church cannot maintain the religious training of the prayer-book and its catechism, if forced into any unnatural juxtaposition with the formularies of the Assembly of Divines; but no reasonable man will urge, that the poor of the three great Presbyterian bodies must be kept rigidly apart, while they are learning the same

catechism, and are instructed by teachers who make the same profession of their faith. If it be urged that the disputes which impede progress arise, not from the difficulty of educating the children of contending Protestant denominations together, but from jealousy as to the government of the schools, we answer, that it must bring deep disgrace on all parties concerned, if no system of mutual concession can be devised, by which these jealousies, so unworthy of Christian ministers, may be ended.

It will not be supposed that, in making these remarks, we advocate any scheme of such latitudinarian comprehensiveness as may tend to indifferentism in matters of religion. We only express our earnest hope that Scottish common-sense will not allow differences, which unhappily do exist, to interfere with a great Christian and patriotic interest, and that all parties will remember the very pressing necessity for some united effort amongst Christians to check the threatening progress of a barbarous heathenism which is fast growing about our very doors. It is, happily, we have said, the almost unanimous verdict of the Scottish people, that education, to be good, must be religious—and, of course, religious teaching would cease to be really religious, if it were refined away by the omission of all doctrines to which persons calling themselves Christians have at any time objected. We advocate an earnest united system, where men can unite; separate systems, where they cannot. All good education, it is agreed, must be religious; and there are some valuable remarks in the work before us as to what religious education is:—

“They who believe in the truths of revelation (says the 214th page of the Report) must, according to the dictates of a sound philosophy, have a practical regard to those truths in the very first entrance of a child upon the work of his education. If, again, we are to be guided by revelation itself, the claims of religion to a paramount regard in education are there presented in the clearest light, and with a force entirely irresistible. Is the child, from the dawning of reason, to derive the moral rule of his conduct, not from the examples of infirmity which surround him, but from the precepts of a law issuing from the very source of purity? Then must he not be instructed in that law? Does the parent believe that his child is partaker of a fallen nature, prone to sin and error, from which he can be rescued only by a sense of responsibility to God, a knowledge of his mercy, and reliance upon him? If that is a real, and not an empty belief, how could a parent, entertaining it, justify himself, should he fail to impart the awful truth, and the divine remedy, to one who, owing his being to him, has a claim to receive from him all the knowledge that his condition and prospects require? It is unnecessary to cite the positive injunctions and direct examples, which the Scriptures, both in the Old and New Testaments, present.”

An obvious answer to these remarks, it is true, presents itself. No one, it is urged, denies their truth in reference to education in its widest sense; but in this sense the schoolmaster does not educate the child. You are confounding two distinct things, the schoolmaster's office and the parent's; and it has always been the especial maxim of Scottish education, that the parent is the real educator of his child. Who ever thought of teaching religion in a Scottish University, or a Scottish High School? There the Professor or the Rector teaches Greek, Latin, or Mathematics, and leaves religion to be taught at home. Why should you make two systems, one for the rich and another for the poor?—But there is really no force in this plausible objection. We will not stay long to contest the point of the education of the higher classes, though even here we have much that we could say. Are you sure that what you call the Scottish system in this matter is not merely the degenerate product of an age which cared very little for religion, when Scotland was more famous for its infidel or semi-infidel philosophers, than for keeping up the memory and the principles of the old champions of the Faith? We suspect those who have a real experimental acquaintance with the education of the upper classes, both in England and in Scotland, will greatly doubt whether Scotland has much to be proud of in this matter. If the parent is to be responsible for the real highest education, this takes for granted, as part of the system, that the son does not leave the parental roof; but you cannot have Universities and High Schools in every town in the kingdom; and even if you had, all parents do not live in towns. Who is to be responsible for his highest training during the seven or eight months of each year for which your boy is away from home? Are we sure it is a very good system of education for the higher classes, which hardly troubles itself at all with the answer to this question? And when your boys do live at home, are parents always or usually able to accomplish this great work unaided? The mother, of course, must be looked to for the very young child, and for the training of her daughters: This is the especial work of a mother, who, indeed, in the upper classes, has no other work to do; but will the boy and young man fare equally well with his sisters, if trusted entirely to his father, when the father is greatly occupied? To be sure the pastor of the parish must be looked to to fill up what the father leaves undone: But we confess—when we have read Arnold's sermons, and thought of the thrilling interest with which his energetic words of Christian wisdom used to be listened to in a chapel thronged with boys, and have called to mind what a hold the simple services of that chapel gained over many hearts—how to many, in the trials of after life, the thought of it

has recurred, as the truest exemplification they have ever met with of the reality of Christianity, and they have felt strongly stirred by the memory of it to hate what is base, and love what is truly Christian—we feel that Scotland has much to learn, even in the construction of its system of training for the upper classes, from the example which has spread, from Arnold and Rugby, to many great schools in England.* And when from the upper classes we come to the lower, the case seems quite clear. It never has been the theory of Scottish education for the poor, that the schoolmaster is a mere secular instructor. How can the parent, in this class, do thoroughly the work imposed on him? Thank God, there are still in Scotland many specimens of the old God-fearing Scotch peasantry. They may be fit thus to rule and train their boys; but we are sure they would be the

* Mr. Stanley's account of the effect of Arnold's preaching is well worth quoting. — *Arnold's Life*, vol. i. chap. iii. p. 153.

"It is difficult to describe, without appearing to exaggerate, the attention with which he was heard by all above the very young boys. Years have passed away, and many of his pupils can look back to hardly any greater interest than that with which, for those twenty minutes, Sunday after Sunday, they sat beneath that pulpit, with their eyes fixed upon him, and their attention strained to the utmost to catch every word that he uttered. It is true that, even to the best, there was much, and to the mass of boys the greater part of what he said, that must have passed away from them, as soon as they heard it, without any corresponding fruits; but they were struck, as boys naturally would be, by the originality of his thoughts, and what always impressed them as the beauty of his language; and in the substance of what he said, much that might have seemed useless, because, for the most part, impracticable to boys, was not without its effect, in breaking completely through the corrupt atmosphere of school opinion, and exhibiting before them, once every week, an image of high principle and feeling, which they felt was not put on for the occasion, but was constantly living amongst them. And to all it must have been an advantage that, for once in their lives, they had listened to sermons which none could associate with the thought of weariness, formality, or exaggeration. On many there was left an impression, to which, though unheeded at the time, they recurred in after life; even the most careless boys would sometimes, during the course of the week, refer almost involuntarily to the sermon of the past Sunday, as a condemnation of what they were doing; and some, whilst they wonder how it was that so little practical effect was produced upon themselves at the time, yet retain the recollection (to give the words of one who so describes himself) that 'I used to listen to them, from first to last, with a kind of awe, and over and over again could not join my friends at the chapel door, but would walk home to be alone; and I remember the same effects being produced by them, more or less, on others whom I should have thought as hard as stones, and on whom I should think Arnold looked as some of the worst boys in the school.'"

The boys whom Arnold thus addressed were most of them boarders, at a distance from their homes; but there were always some living with their parents in the town of Rugby. Was there, in such cases, any clashing with the parents' duty and authority in those earnest addresses, and in the general pastoral superintendence which the master sought to exercise? So far from it, we are sure that any right minded parent would earnestly desire such additional advantages for his son, however watchfully cared for under his own roof.

In the education, both of the upper classes and the lower, sufficient attention has not, we think, yet been paid to the effect which may be produced by such earnest short addresses from the pulpit, spoken with especial reference to the wants and feelings of the young.

very last to wish that the schoolmaster should forget the religious responsibilities of his office. Unfortunately the number of such peasants by no means bears the same proportion to the population as it did in the old days. The swarming thousands of the abject poor in our large towns, how can they gain a religious training from their degraded homes? Indeed, we must say of very many thousands of this class, that, if they are to have a religious training at all, it must be given them in connexion with their school.

Mr. Stow, who has done so much for Scottish education, states* his experience in this matter, in Dr. Chalmers's famous parish of St. John's, Glasgow:—"Much good was unquestionably done in that parish, through the Doctor (Chalmers) and his parochial agency, and which was continued by his successors in the pastoral office. But, as one of those agents, I found a sad gap in the machinery. . . . I held the office of Sabbath-school teacher, and elder in one district containing 300 inhabitants, and that of deacon for the management of the poor, &c., in another, containing 500. . . . My knowledge of these districts, and of the parish generally, led me to this conclusion, that, . . . with the exception of a very few children in some of the Sabbath-schools, the young generally continued to grow up with rude, grovelling, and ungodly habits: instructed they might be, to a certain extent, it is true, but they were not morally trained." This led Mr. Stow to make more distinct efforts to gain for the schoolmaster, over his children, the influence of pastor and guide, as much as instructor, by the adoption of what he has called his Training System. The school, such as he would develop it, "comprehends a carrying out of proper family training into the public school, and is intended as an assistant to parents."† We often hear the remark, that instruction does not curb evil propensities,—that many of the greatest villains can read and write far better than their equals. "In Scripture," Mr. Stow remarks, "the command is given, 'Train up a child in the way he should go,' and the promise attached to the precept is, 'And when he is old he will not depart from it.' Whatever may have been done in families, this has not been the practice hitherto in popular schools. Teaching or instruction has been given, not training; or, at the best, the head has been trained, not the child,"—the whole man. "We have, therefore, no right to expect the fulfilment of the promise which is attached to the precept. Too frequently children are trained elsewhere than in school, in the way they should *not* go, and when old they do not depart from it. . . . The command,

* *The Training System*, p. 22, 12mo, London, 1854.

† *Ibid.*, p. 40.

‘Train,’ is of course addressed to parents; and what they cannot accomplish personally, they are bound to do by proxy; and what better or more suitable proxy than the schoolmaster, to whom is generally handed over the care of their children for several hours a day.* As to whether Mr. Stow’s training system, in its details, may be capable of being fully carried out through the country generally, we pronounce no opinion; but of this we are certain, that there can be no real education for the very poor, apart from the principle he has so well enunciated;—and if education is to be training, of course there can be no good education that is not based upon religion. This principle, as here stated, is distinctly insisted on throughout the Report before us.

But here a great difficulty occurs. If there can be no really good education which is not religious, there certainly can be no really religious education without a religiously disposed teacher. We hear a great deal now-a-days about Christian schools and Christian training, but there is no patent method for training boys as Christians without Christian example. In the Report, (p. 236,) we are glad to find the following testimony to the great Busby:—

“In the instructive and delightful Life of Philip Henry, by his son, we are informed that he received the Lord’s Supper, while yet a pupil at Westminster School, and that he would often speak of the great pains with which his master, Dr. Busby, prepared him and others for that solemn ordinance; ‘with what skill and seriousness of application, and manifest concern for their souls, he opened to them the nature of the ordinance, and of the work they had to do in it; and instructed them what was to be done in preparation for it; and this he made a business of, appointing them their religious exercises, instead of their school exercises.’ The success of this is then stated in the pupil’s own warm and emphatic language; and it is added, ‘Dr. Busby’s agency, under God, in this blessed work, he makes a very grateful mention of in divers of his papers. The Lord recompense it, saith he, a thousandfold into his bosom.’”†

The Report then goes on, in illustration of the same point, to adduce from Dr. Pearson’s Life of Swartz, (vol. i. p. 56,) the following testimony as to the teacher of this great missionary’s early youth:—

“The venerable Swartz,” says the Report, “has been characterized by Bishop Heber as one of the most successful missionaries who have appeared since the Apostles. . . . If we turn to the early training of this remarkable man, we find, that at the age of eight years, young

* *Training System*, pp. 36, 37.

† *Report*, p. 236.

Swartz was sent to the principal grammar school at Sonnenburg, where, together with the elements of classical learning, he received many good impressions from the moral and religious instructions of its rector, Mr. Helm. This excellent person particularly enforced on his pupils the importance of private devotion, and encouraged them to offer up their petitions in language suggested by their own feelings. Swartz afterwards declared that, even at that very early age, he used frequently to retire from his youthful companions into solitude, and there poured out his heart before God. On the removal of Mr. Helm, . . . his successor neglected the religious improvement of his scholars, and Swartz (for a time) became comparatively indifferent."

Again, the Report adds, (p. 238 :)—

"The mind naturally turns to Dr. Arnold as a striking and most instructive illustration of the principles which have been stated. No greater service has been rendered to the cause of education generally than the publication of his *Life and Correspondence*. . . . He was a teacher of high talent, who gave his whole heart and soul to the advancement of his pupils and government of his school; but he was also an earnest Christian, who could not separate his piety from his daily work, or withhold his influence from those committed to his charge."

But it is scarcely necessary to seek examples for confirmation of a truth so obvious,—that we must have a Christian schoolmaster if we would have a really Christian school. The days are happily passing, if not quite passed, when the schoolmaster of the school for the poor was not very unfrequently the greatest reprobate in the parish. A few instances still linger in remote country districts. May we trust that, in Scotland, the presbyterial superintendence, notwithstanding the difficulties which have impeded its efficient exercise, has tended to prevent such a state of things from springing up? In England, amongst small endowed schools, which are under no efficient government of trustees, there are certainly still, here and there, drunken and immoral schoolmasters. This evil is the relic of a neglectful age, and a low state of public opinion, and will soon, we trust, have disappeared; but there is a great gap between open immorality and that high Christian bearing, to gain which for the teachers of our youth ought to be the effort and prayer of all who love

* It has been thought by some that Sir J. K. Shuttleworth has (as in his remarks, p. 327, &c.) not done justice to the efficiency of the presbyterial superintendence and power of deposition. We are informed on high authority, that, during the last fifty years, there have been at least seventy cases of actual prosecution of masters: thirty-nine of which have ended in deposition, and seventeen in withdrawal. Still it must be granted that there are many difficulties, pecuniary and otherwise, in the way, to prevent all delinquents from being punished.

their country. What a vast responsibility thus devolves on those who guide our training-schools, for masters and mistresses: where the future trainers of our youth are to be themselves trained. We trust earnestly, that the Government inspectors will never lose sight of the paramount importance of moral and religious qualities, while they insist, with wise inflexibility, on the maintenance of a high intellectual test.

Perhaps there is no man whose character is so continually exposed to observation as the schoolmaster: a hundred prying eyes eagerly, with youthful quickness, note his every look; his lightest word is weighty for the small republic over which he rules; besides he is exposed to great trials of temper; and the varieties of his temper are always watched carefully, as inspiring fear or hope. There is no man who has so much need of thorough self-control, if he is to do his duty,—and very few, who, if they fail of their duty, will do more immediate and extensive harm. Unless, therefore, a schoolmaster enters on his work in an earnest Christian spirit, he must fail grievously. No amount of knowledge he can communicate will make amends, if he does moral harm by his example: and he can scarcely avoid doing harm, if he fails to do good.

Besides, the schoolmaster has a great many other peculiar trials. He has much drudgery, which he will never get through satisfactorily for any length of time, unless he be borne up by an enthusiasm that springs from right principle. Often he lives in a remote country district, where he can find few persons of any intelligence to associate with; and if he has been well prepared for his office, he must love intelligent society. Hence his case is like that of the country pastor,—and both will be much exposed to temptations, to settle into indolent habits, unless they have an unfailing spring of healthful activity within.

Perhaps, then, the most important of all the points to which those zealous for education ought now to be directing their attention is, to consider the best means of providing really good masters and mistresses for our schools. We hear a great deal in the present day of the importance of the master's office. Some may be afraid, not without cause, that the common mode of speaking on this subject may inuate our young teachers with self-conceit. A pedant means a schoolmaster; and the way in which the secondary has completely superseded the primary sense of this word, may well remind us what the rock is on which schoolmasters are most apt to be shipwrecked. Sir Walter Scott is reported to have said, in reference to this proverbial failing, that he never "knew a schoolmaster who was not an idiot; and," he used to add, "the greater the schoolmaster the greater the idiot." Of course, self-importance is the natural fault of men

living much with their inferiors in intellect, to whom their very looks are law; and it may be quite possible to aggravate this natural evil by injudicious talk about the high position which the schoolmaster ought to occupy in the social system. It will be a sad consummation of our training colleges, and all our other educational efforts, if we but deluge the land with a new generation of prigs more intolerable than the pompous specimens whom we are accustomed to laugh at as relics of a bygone age.*

The old parish schoolmaster of Scotland was often saved from being a mere pedant by the very necessities of his situation. He was commonly obliged to be a pluralist, in order to eke out his scanty salary; and a man must needs have known something more of the world than falls to the lot of a mere schoolmaster, when, as used often to be the case, he had to unite the duties of secretary to the justices of the peace, collector of the parish rates, and perhaps exciseman and land-surveyor, besides those of precentor or parish-clerk, with his ordinary jurisdiction over the parish school, and was also occasionally obliged to take his turn in the herring fishery, and spend his spare hours in the cultivation of a small farm. Modern improvers not unreasonably complain, that this system of pluralities left the parish school but a poor chance of success: And we shall have few such pluralists in future. The more need, then, since our new race of schoolmasters are to be schoolmasters only, that we take effectual steps to save them from a schoolmaster's faults. Men will not be made fit for a difficult position by merely talking of its importance, but by being very diligently and thoroughly taught whatever they are required to know—by having the difficulties they are sure to meet with carefully pointed out to them, and being made, with God's blessing, to feel, rather than speak, of their responsibilities, while they daily learn how impossible it will be to fulfil them without very earnest efforts. A mere enumeration of some of the chief qualifications for a good schoolmaster, such as we find them set forth in the Report before us, ought to be enough to make a self-confident man humble.

* We cannot but think, that it would be a great evil to break off that connexion which has hitherto existed in Scotland between the Universities and schoolmasters. The Privy Council Committee are supposed to be anxious to substitute education in a Training College for the old University course. Our belief is, that ~~the two~~ modes of training may easily be united. A schoolmaster is much more likely to be narrow-minded, if he has received only a schoolmaster's training, than if he has united such training with a good University course. A similar remark may apply to the desire supposed to be manifested by the Committee of Council, to discourage the study of the Classics in pupil teachers. It will be a great mistake if the Council attempt to square Scottish on the model of English schools. They have an eminent young Scotsman holding a high situation in their office in London: we trust they will not fail always to consult distinctly Scottish authorities before they make rules for Scotland.

Personal piety—vigour both of mind and body—natural aptitude to teach, and a power of sympathizing with the young—learning—earnestness of purpose, and genuine simplicity and humility, united with a power to command—who is the man adorned with all these gifts? Yet always, so far forth as the master fails in any of them, he is deficient for his work. It may be thought that the learning is not great which is required to teach a parish school: yet even the range of study is in itself considerable; and, if a man is to teach freshly and thoroughly, he must know a great deal more than he is required daily to communicate. His highest class, and the pupil teachers, between sixteen and nineteen years of age, whom he is required to prepare for examination, will very soon find out his shallowness, if he is not always increasing his own stores.

It is said of Arnold, in words wisely quoted from his Life in this Report:—*

“Whatever labour he bestowed on his literary works, was only part of the constant progress of self-education, which he thought essential to the right discharge of his duties as a teacher. . . . Intellectually as well as morally, he felt that the teacher ought himself to be perpetually learning, and so constantly above the level of his scholars. I am sure, he said, speaking of his pupils at Laleham, that I do not judge of them, or expect of them, as I should, if I were not taking pains to improve my own mind.”

We lay it down as a certain principle that a good school-master, even for the poor, must be a student. He must study for the general improvement of his mind; and he must study specially in preparation each day for the principal lessons he has to teach. Without this special preparation, even a man of high abilities will be apt to teach vaguely; he will not know at once the points on which it is of chief importance to dwell, for the sake of the particular pupils he instructs. The peculiar nature of the Scottish parish school makes such efforts on the teacher's part even more necessary than in England. * It is well known that it is in the country schools of Scotland that many youths receive their only preliminary instruction before they go to the universities. Hence the master is very commonly required to be able to teach the Classics. An instance is mentioned in the Report (p. 158), of “a remote Highland parish in the southern extremity of Banffshire having had the benefit, since 1845, of a teacher of such scholarship as to qualify him to discharge temporarily the duties of the Greek chair, King's College, Aberdeen, with general approval.” The schoolmasters of Scotland have in

a great degree in their hands the early education of the future Scottish clergy. We cannot speak too strongly of the necessity for their labouring to make themselves men of cultivated minds.*

We have said that bodily as well as mental vigour is requisite for a good schoolmaster. This opens up an important question. Arnold used to say that he would leave Rugby as soon as he found that he could not run up the library stairs. A vigorous mind may indeed long sustain the flagging energies of the body in spite of bad health or the approaches of old age; but, speaking generally, of course a schoolmaster ought not to be an old or infirm man. Something must be done to provide schoolmasters with the means of retiring, if we are to have them everywhere generally efficient. The Dean of Hereford, in the introduction to his *Suggestive Hints*,† thus writes on this subject:—

“Mr. Mouseley in his Report of last year, (1848,) calls the attention of schoolmasters to a most important subject—one not less important to their own happiness and welfare, and to that of their families, than it is to the interests of education in general—the consideration of means for providing for support in time of sickness and of old age, and of contributing towards the maintenance of a family in case of death; he adds, that a mutual assurance or benefit society, formed upon a secure basis, among persons of this class, and conducted under the auspices of the Council on Education, would be an inestimable benefit.” “This is a question in which the public are deeply interested, as affording the only means of protection against a master continuing to hold his situation, when from age and infirmity he is unfit for the duties of it; and school-managers will find some plan of this kind their only security against incompetent teachers, who have become so from being advanced in life, and whom it would be cruel and unjust to deprive of their situations, unless they had some provision to fall back upon.”

The Dean of Hereford suggests that the Committee of Council on Education might well be expected to give some assistance towards so desirable an object, and would call in the help of the Chancellor of the Exchequer. No doubt the sanction at least of Government will be required before such a scheme can be effectually matured. On this, however, as on kindred subjects, it is rather our purpose in this article to point out how the efforts of individuals must aid and outrun Government, if anything effectual is to be speedily done.

* In the Scottish schools, as is well known, the plan of amalgamating the different ranks in the same school, so earnestly recommended by the Dean of Hereford, has long been tried.

† *Suggestive Hints in Secular Instruction*. Sixth edition. London, 1853. P. 25.

And now we would bring our present remarks to a close, by noticing three points to which we wish the attention of all well-wishers of education in Scotland to be directed, while a Government measure is in suspense. The grand desideratum, as we have stated all through this article, is to secure proper teachers. It ought to be the effort of the friends of education to raise the teacher, and increase his efficiency in every possible way. For this purpose we beg them to consider how far individuals, and the trustees of the various educational endowments in the land, can exert themselves even without waiting for Government;—1st, To provide retiring pensions for masters and mistresses when unfit for duty; 2d, To increase their salaries while still active; and, 3dly, To found and maintain efficient schools or colleges in which they may be duly trained.

The higher classes of Scotland have scarcely contributed so much as they ought to do for education. The poor maintenance allotted to the parish schoolmaster, is a tax upon the land, and ought not to be reckoned a gift of charity. The laird has bought his property subject to this charge, and it in no way comes out of his pocket. Considering the vast sums which are voluntarily raised in England to support the 17,000 schools of the English Church, is it too much to expect that great voluntary efforts will be made in Scotland to aid in placing schoolmasters in the position which they must occupy if they are to be fit for their work? A good schoolmaster in England must have £70, or at least £60 a-year secured to him from private sources, besides all he can gain from the Government payments for his pupil teachers and his certificate, and with this he is only moderately paid. A regimental schoolmaster receives from the War Office from 5s. to 7s. a-day, besides his allowances; and do the people of Scotland expect that they are to have their pick of efficient masters for the paltry sums now very commonly offered? Amount of salary, and similar advantages, will not make a good master; but you cannot expect good masters without fair salaries. Young men of talent and enterprise will of course seek other employments unless you treat them fairly. It will be the rankest hypocrisy to talk of your conviction of the necessity for securing the services of good masters, if you do not take steps to place them beyond the reach of want. By providing retired allowances, and by increasing actual salaries, make your situations fairly desirable, and then you may with propriety urge young men of promise to undergo the laborious necessary training, and dedicate to you the services of their lives. Voluntary educational efforts in Scotland are said to have somewhat languished—as has been so often the case elsewhere—from the very extensiveness of the public endowments.

As in the case of the old poor-law of England, the public provision has had a tendency to dry up the sources of private benevolence. The Established Church of Scotland, and the other religious communions, indeed, are vigorously at work now by their education schemes, in stimulating private benevolence, and a great responsibility rests on all who have money in Scotland to second such efforts.

Lastly, there is a great field open for the proper training of teachers. Without great voluntary efforts of individual benevolence, this want cannot be adequately supplied. It is in vain to prate about the desirableness of securing Christian teachers, if you will not form an adequate number of suitable institutions in which they may receive a Christian training, in connexion with a knowledge of their life's work.

Sir J. K. Shuttleworth points out* the deficiency in this respect. It is true that many of the parochial schoolmasters receive a good general education. Most, or at least a large proportion of them, have passed through the Universities; but few of them have undergone any regular course of professional training. Those who had not received such training, we are told,† had been found very deficient "in the general arrangements and organization of their schools, in the power of adapting their instructions to the young and untrained minds, in the success with which they conducted the analysis of the various lessons, and in the felicity and fulness with which they illustrated them; and especially in the energy and spirit with which the school business was gone through." Much has been done since the words thus quoted by Sir J. K. Shuttleworth were written; but the training schools of the Establishment and the Free Church, and of the Scottish Episcopal Church, in Edinburgh and in Glasgow, are only the commencement of a system which needs to be greatly extended. Besides schools for mistresses, there ought to be at least one training school or college for masters connected with each of the Scottish Universities. It is a decided advantage that the Scottish schoolmaster receives so commonly a University education. We will not pronounce an opinion on what Sir J. K. Shuttleworth thinks so desirable,‡ the separation of the schoolmaster office from that of the licentiate in the ministry: he wishes that the schoolmaster's should be constituted into a distinct profession by itself—having the rectorships of high schools and professorships in the universities as its highest honours. We can see great advantages in the connexion

* *Public Education*, pp. 370, 376, 380, 381.

† Mr. Gibson's Report on Tongue and Main. Minutes 1842-3, p. 669. Quoted by Sir J. K. Shuttleworth, p. 381.

‡ *Public Education*, p. 380.

with the ministry, and the openings thus made for the school-master's advancement into a different, if not higher, sphere of usefulness, which make it desirable, at least, to pause before this connexion be rudely severed. But desirable as it is that Scottish schoolmasters should not forfeit that University course which so many of them now pursue side by side with their companions who enter at once more distinctly on the pastoral office—they certainly ought to have, besides this, some definite training for their difficult work.* A young man ought to be required, in Scotland as in England, to pass a considerable time in such a training college, in which he would be aided by pecuniary support from Government, in reward for merit, as in England. A few extracts from Sir J. K. Shuttleworth's account of the English Training Schools, may not be unacceptable in this connexion, as explaining distinctly the principle of these training colleges, and therefore as likely to aid the efforts, at present strenuously making, to give them a fixed standing on the soil of Scotland.

"The English Normal Training School (there are now thirty-six training colleges in England) is founded by the contributions of the religious communion with which it is connected. It generally consists of a group of buildings in a collegiate style of architecture, comprising dormitories, a hall, and a refectory and domestic offices, as well as a library, class-rooms, and a residence for the principal, vice-principal, and three or four masters. Immediately adjacent is an elementary school for the poor, with a house for the master, who is commonly also a teacher of the theory of school method and organization in the college. The committee of council contribute towards the cost of the collegiate buildings at the rate of £50 for every student accommodated, and about one-third of the cost of the practising school. The governing body generally consists of about equal numbers of clergy and laity. . . . The English Training College differs from that which existed in France under the direction of the University, inasmuch as it is founded and governed by the religious communion: the primary responsibility for its main-

* Sir J. K. Shuttleworth (p. 337) thus states his views as to Scottish training schools for teachers:—"Of late years the Established and Free Churches have each established a normal school both in Edinburgh and Glasgow. These schools should endeavour to complete the collegiate (University) courses, by moulding them to the peculiar form required for elementary schools. They should develop a course of instruction in the principles of teaching, and illustrate the art by all the expedients which belong to a series of model schools devoted to this object. Such a normal school should be attached to each of the Scottish Universities; and the candidate for a parochial mastership, after a course of two years in the college (University), should finish his education by (an additional) year's training in the normal school."

tenance rests on that body, and the whole discipline and management are immediately under its control. It is only secondarily that the Government interferes by inspection to ascertain whether a certain standard is attained in the results of the courses of study; and according to this standard to apportion the aid of the State."

In future, "the Queen's scholars (chosen from the best of the apprentice pupil teachers in the various schools under inspection) will feed these colleges with a class of students systematically prepared by a special education and practical training. The whole groundwork of their studies will have been laid with technical accuracy—they will have acquired considerable practical acquaintance with school-keeping. . . . Moreover, they will be trained to the duties of their collegiate course; they will have a full acquaintance with the responsibilities, hopes, and rewards of their future career, and will therefore be under the influence of the most powerful incentives to exertion."*

It is, we think, from such institutions as these, wisely arranged on Christian principles, that we have the best hope of obtaining a supply of well ordered teachers, deeply impressed with the difficulty and responsibility of their work. In no way, we think, can the benevolence of Christian men in Scotland better shew itself, than by carefully using every effort to multiply such institutions in the land, and to secure their efficiency by placing them under the best rules, and electing the best men for their superintendence.

It must be remembered that the schools over which the young teachers we educate are to be placed, are as various as the varying conditions of our remote and ignorant Highland, our intelligent Lowland, and our overcrowded and debased city parishes. To give that varied training which such a varied

* Sir J. K. Shuttleworth (p. 77) states the assistance which Government offers for the maintenance of such colleges:—"The annual income of the colleges will (through the arrangements of the Government) receive a supply, by which they will be enabled to appoint masters of greater ability, and to increase their number as well as to prolong the course of instruction. For every Queen's scholar admitted the Government will pay from £20 to £30, towards the cost of his maintenance and education during the first year; and if he obtain a certificate at the examination of the Queen's Inspector, at its close, a second contribution of £20 will be made. The whole expenses of his education and maintenance, including all salaries and other charges, except clothing, may, in a well-conducted training school, be estimated at £50. In the first year, therefore, three-fourths of this outlay, for a successful student, will be borne by the Government. His clothes will be found by his parents, and the training school will have to provide, from private contributions or the aid of his patron, the rest of the charge. In the second year, a successful student will, by his certificate, secure £25, and, in the third year, £30, towards these expenses. In the majority of cases, either the parents or the patrons will pay at least half the remaining sum; and every college has private exhibitions and additional rewards for success, by which the other half may be won by vigorous application."

state of society will require, demands the superintendence of wise and God-fearing men. It is by no commonplace training, no suggestion of common worldly motives, but only by inculcating a dedication of the whole man to his work on the highest Christian principles, that we can hope to succeed in keeping our teachers unwearied in their work of toil, whether their lot be cast amid the haunts of the deer in some lonely glen, or in the close purlicue of a manufactory. And it is no common wisdom that will be required to guide young men how to adapt their instructions, on the one hand, to the credulous ignorance of the mountain side; or, on the other, to the hard scepticism, as to all goodness, and soured discontent with all our social institutions, which spreads from the Chartist reading-room through the high-rented and ill-built cottages, which perpetually remind the factory workmen and his family, who live in them, that they move in a society where every man is trying to make as much gain as he can out of his fellow's wants.

In all these three ways, then—in providing retiring pensions for teachers, in increasing their salaries while at work, and founding and supporting training colleges—there is abundant room in Scotland for benevolent Christian men to exert themselves, if they would improve the national system of education, while Government stands still. In any particular locality, too, a man who is on the look out to repair what is amiss, will find much scope to expend his money and his zeal, even in filling up the deficiencies of the schools as they already exist. “At present the school fittings and apparatus, even in the parochial schools of Scotland, are often meagre; and when the furniture is substantial, it is seldom arranged in any intelligent scheme of school discipline.”* Any man who has his eyes open will find much to improve, by private exertion, without waiting for Government, in the schools that are about his door. But, we repeat it, he must not look to his own neighbourhood only. If the Scottish people are in earnest in calling upon Government for a good national system, they must themselves set to work vigorously throughout all Scotland. Scotland is not rich; but the Free Church movement showed what funds it can call forth, from efforts of self-denial, when its feelings are aroused. And the exertions already made, in the educational and other schemes, both of the Established and Free Churches, to say nothing of the many schools for the poor, lately founded by private benevolence, in the Scottish Episcopal Church, give good ground to hope that this greatest of all causes will not be allowed to languish for want of self-denying benevolence. The only way to force

* Sir J. K. Shuttleworth, p. 381.

Government to efficient action is to show that you are in earnest, by beginning at once that part of the work which depends entirely on yourselves. Every candid man must feel, that the day for inaction or hesitation has now passed. We end by drawing attention to the closing words of Sir J. K. Shuttleworth's book, words applicable alike to England and Scotland, which deserve to be well weighed, at this time, by every lover of his country. If sectarian disputes, or selfish indolence, make men hesitate to exert themselves, he points out how there is a "fearful alternative. The reign of ignorance, brutish habits, crime, and heathenism, may be indefinitely prolonged. This cloud may brood, with the gloom of hell, over the destinies of a heroic race; nor can any human prescience foretell what may be the catastrophe, when its dark womb struggles with the throes of a new birth, amidst the lightnings of social convulsion. If the monarchy and the representative system of Great Britain are to perish, it will not be from any conspiracy of the nobles: Magna Charta, and the Revolution Settlement, secured and limited their influence in the constitution. Nor will it arise from the rebellion of the middle classes, who acquired their due share of political power by the Reform Bill. But the dominion of an ignorant and demoralized democracy is scarcely more fatal than the growth of popular discontent—the inevitable consequence of the waste of national resources, by a people who multiply without forethought, purchase misery by improvidence, and exchange the frenzy of inebriety for the madness of political fanaticism. The sure road to Socialism is by a prolongation of the contrasts between luxury and destitution, vast accumulations and ill rewarded toil, high cultivation and barbarism, the enjoyment of political privileges and the exclusion from its rights by ignorance and indigence. The means of solving these great social problems lies in the Christian civilisation of the entire people by the public school."

ART. III.—*History of Latin Christianity; including that of the Popes, to the Pontificate of Nicolas V.* By HENRY HART MILMAN, D.D., Dean of St. Paul's. 3 Vols. London, 1854.

WHEN Virgil's *ex post facto* prophecy of the greatness of Rome* was read at the court of Augustus, it must have seemed to the statesmen and moralists who heard it a truthful description of the past, but a doubtful presage of the future. None felt more keenly than Augustus himself that Rome was decaying. Religious belief was dead: mixed with the creations of irreverent æsthetic Greece, its original simplicity had vanished, and with that its moral power. The ritual worship had become obsolete: even learned Romans walked among their national sanctuaries like foreigners,† witnessing ceremonies of which the meaning was forgotten, and hearing liturgies and hymns of which they could hardly understand a word. The free constitution, essentially municipal, and therefore incapable of embracing a world, had been replaced by a despotism, neither restrained by fear of the people, nor ennobled by belief of a mission from God. The stern morality, the pure domestic life, the upright civic justice, the self-sacrificing patriotism, even the physical courage, had died with the religion, and drawing down first the liberty, and then the power, had resulted in a heroic age of vice. Roman vigour seemed to linger only in the armies and the laws; and these too were decaying. Yet within twenty years the spirit was to go forth that was to breathe life into these dry bones. Rome, reinvigorated by Christianity, was to feel once more her office to rule the nations. A new spiritual power was to go forth essentially and characteristically Roman. This power was in after years to subdue, and recruit its armies from, those daring German tribes which the first Rome could never conquer, and by their aid at last extend its empire far beyond the old poetical frontier of the Garamantes and Indians. This *second* Roman empire, its foundation, rise, conquests, heroes, glory, and decline, is the subject of Dr. Milman's History.

The subject is a very difficult one. In ten centuries, over which this work extends, there lived no great historian, and (with the exception perhaps of Socrates) no calm and truthful observer of his times. Every man was a partisan, and felt bound to be so. Christendom was at war in a cause, that all protested, and the nobler believed, to be the cause of God. In such a cause it would seem but lukewarmness to pause and examine

* Virg. *Æn.* vi.

† Cic. *Acad.* ii. c. 3.

the weapons that they used. A heathen or a heretic was the enemy of old; could they doubt any evil, could they believe any good of him? But besides the difficulties caused by honest prejudice, ecclesiastical history has been perplexed by wilful fraud. From the time when (in the second century at latest) the early Christians began, with the best motives, but with the most fatal results, to compose pious romances on the lives of their Founder, or his disciples,* to forge legal documents to strengthen the evidence of the truth,† to interpolate the works of famous authors,‡ and to draw from the lips of Pagan sibyls testimonies to the Messiah clearer than those of Jewish prophecy, to the time when revived historical and philological criticism rendered the ablest forgery certain of detection, it is constantly necessary to be on the watch against pious frauds. Thus the ecclesiastical historian has to steer his course, not only through the natural rocks and shoals, but through artificial obstructions placed wilfully in his way. He must allow for prejudices, soften down exaggerations, reject lies, detect forgeries, and be thankful if, after all, there remains to him a residuum of probable truth. Moreover, his predecessors in the task of compiling from the original sources have done more to perplex than to assist him. Every event, every character, every opinion, has been the subject of long, intricate, too often hostile controversy.§

To this difficult task Dr. Milman has applied great care and rare honesty; and the result is a work of real and permanent value. We will, however, reserve our very favourable opinion of his History for the conclusion of our article, when a slight sketch of the subject will have furnished our readers with an idea of the grounds on which it rests. We will take first the more invidious task of noticing what seem to us two defects in his plan.

In the first place, we think that no ecclesiastical history can be complete or satisfactory without at least a sketch, and something approaching to an estimate of the sources from which it is drawn. Dr. Milman disclaims all such dissertations upon history as alien to his aim.¶ He professes to give the result only, and not the process of inquiry. But the subject upon which he writes is one on which no one can submit to receive all his instruction at second hand. We do not read a work in this

* The Apocryphal Gospels: The Clementina: The Apocryphal Acts.—Does not the subscription of Pionius condemn the martyrdom of Polycarp to take its place in the same class?

† The Acts of Pilate. The Epistle of Antonius in Justin. Apol. i. 68.

‡ The interpolation of Josephus (Ant. xiii. 3. 3.) in the interest of Christianity: of Ignatius at least once.

§ Latin Christianity. Preface.

¶ Preface.

department for mere amusement, or admire it only as a work of art, but we study it because we feel that it has a bearing on our own trial with respect to truth. Two faiths still divide Latin Christendom,—one professing to be the Christianity of the New Testament, the other not unwilling to be thought the Christianity of History.* Which is to be ours? Are we to draw our belief freely with our own lips from the fountain, or receive it, as developed by an external power, under the various influences of the world, and chiefly in the hands of that great nation twice conqueror of the world? Which has the legitimate claim on us—the original documents, or their development in the lapse of time? Serious students read with these questions on their minds; and are anxious to learn what the results of ecclesiastical history are worth, both in themselves, and as compared with those of the Bible. Sufficient answers can only be given by a view of the original materials. Therefore we think that in spite of his plan, Dr. Milman should have given us, and should give in future editions, (which doubtless will be many,) a chapter on the sources; and also that, at the risk of seeming to plagiarize from Gieseler, whose value he so justly recognises, he should have extracted from his original authorities with some of the copiousness of that writer, or at least have referred to them with that frequency which renders Gibbon's notes (when decent) the most interesting part of his book, and so pleasant a relief to his pompous periods.

The second defect that we have to notice is the incompleteness of the commencement. The work begins as a *résumé*, and retains this character through the greater part of the purely Latin period. The detailed treatment of the first ages of Latin Christianity—of its very birth-epoch, in which the original religion first came in contact with Rome, and was subdued by her imperial spirit, must be sought in another previous work—the “History of Christianity.” We fully appreciate the author's motive for this omission: no doubt he disliked to repeat himself. But a history of Latin Christianity ought to exhaust its own special subject: nor can it be considered complete, while it gives only a summary account of that period, in which that phase of religion, of which it treats, was forming itself from Latin institutions, Latin religious ideas, and Latin modes of thought, in the midst of a Latin speaking population, and on native Latin ground.

We shall first direct our reader's attention to this portion of the subject, which seems to us the most important of the whole.

* J. H. Newman. *Essay on Development*, p. 7.

Amidst the obscurity of early Church history, nowhere more dense than around the birth of the Roman Church, we may detect the fact, and to some extent the process, of a change, as complete and important, yet, at the same time, as speedy and insensible, as ever affected any institution in the world. In the Acts of Justin's Martyrdom (a document undoubtedly very ancient, and from its simplicity, and the absence both of the pathetic and the marvellous, most probably genuine) and the works of that father, we find that the outward form of the Church of Rome, and in a great measure its doctrine, remained in his day (A. D. 150) unaltered since the time when, at the close of the sacred history, we lost sight of Paul. To the church in the house of Aquila and Priscilla,* or the hired house in which Paul taught,† has succeeded a Christian meeting‡ at the house of one Martinus, in whose upper chamber Justin lodged. This was the only meeting in the great city of which the Syrian stranger knew, though he had resided twice at Rome. There could have been no strong and compact ecclesiastical organization in those days, nor could the different congregations have been subject to any superior control. Each brother met his brethren where he pleased,§ and there must have been in the vast city many congregations quite unknown one to another. The internal government of each congregation was already monarchical: the principal functions of divine worship were discharged, and the common funds administered by a permanent officer whom the Christians, when they described their internal economy to those without, called their president or presiding brother:|| but he was not their priest: all alike were members of a priestly race;¶ and the idea of the officer of the Church being more priestly than his brethren had not yet appeared at Rome. In the initiatory washing by which the convert was admitted he received the remission of his sins.** It was called his New Birth or his Enlightenment:‡‡ but that enlightenment was not attributed to the magic virtue of the mystic water, but to the instruction which the convert had received;§§ and the need of the new birth was asserted on this singular ground, that since each had been born into the world without his own choice or knowledge, he ought to have the opportunity of being born again by his own choice and will.¶¶

* Rom. xvi. 5. † Acts xxviii. 30. ‡ συνίλιυσις. Act. Mart. Justin.

§ ἰνθα ἰκάνουσιν προαίρεσις καὶ δύναμις ἔσται. Act. Mart. Justin.

|| ἡ προίεσις. Apol. i. 67. τῶν προιεστῶν τῶν ἀδελφῶν. Act. Mart. Justin. 65.

¶ ἡμῖς, οἱ . . . πιστεύσαντες . . . ἀρχιεραστὴν . . . γίνεσθαι τῷ Θεῷ. C. Tryph. 116.

** ἀφιστάς τι ἡμαρτημάτων . . . σύνταμιεν ἐν τῷ ὕδατι. Apol. i. 61.

‡‡ Αναγέννησις . . . φαντασίαι.

§§ ὡς φωτισθέντων τὴν διάνοιαν τῶν ταῦτα μαθησάμενων. Apol. i. 61.

¶¶ Apol. 61.

The idea of a sacrificial right had begun slightly, and only slightly, to connect itself with the Lord's Supper; but the objects supposed to be offered were still the prayers and thanksgivings, not yet the bread and wine.* Prayer and thanksgiving were still affirmed to be the only perfect sacrifice.† The whole worship was still very simple: and religious teaching occupied in it the chief place.

Exactly one hundred years later we reach the period of the correspondence in which Cyprian of Carthage is the most conspicuous figure. The change is very striking. The churches of Rome and Carthage have become fully organized, each under its bishop. That bishop's seat has become a sacerdotal throne.‡ He bears a title of honour;§ the very one that the earliest documents of the religion might seem to have forbidden.|| The office is an object of secular ambition:¶ it is a post of danger; but that danger is counterbalanced by the distinction and the power. At Rome the bishop is become the priest of one of the largest sects in the city. He can complacently enumerate his 46 presbyters, 7 deacons, 7 sub-deacons, 42 acolyths, 52 exorcists, readers, and door-keepers,** all dependent on his will. That will is law at home; and he attempts to impose it on other churches beyond his immediate domain. He disposes of vast wealth contributed by the faithful:†† 1500 widows receive from him their daily food. There are already ecclesiastical enactments as foundations of a future canon law.‡‡ The affairs of the see are conducted with business-like regularity. A staff of messengers is maintained to forward his extensive correspondence with near and distant churches. All letters are answered, copied, and filed with the regularity of an official bureau.§§ The business of the soul is despatched with no less exactness. There is one Church, the outward one. It is a

* The elements were nevertheless said to be not *novum ægeros* or *novum pœma*, but *ἱεροῦ σάκρα καὶ αἶμα*. See Apol. i. 66.

† C. Tryph. 117.

‡ Cathedra sacerdotalis.

§ "Papa," applied indiscriminately to all the great prelates. || Matth. xxiii. 9.

¶ This is sufficiently proved by the gross abuse that the candidates shower upon each other, Hippolytus on Callistus, Cornelius on Novatian, Cyprian on Felicesimus.

** Eus. b. H. E. vi. 43.

†† Cyprian's gardens, when sold for the benefit of the Church, were repurchased by his people, and presented to him as a testimonial of respect. He sends in one sum 100,000 sesterces (£780) of Church money to redeem captives in Numidia. His last order is to give five guineas (aurei) to his executioner. The Roman Church was in the habit of sending relief to the poorer churches. (Eus. H. E. iv. 23.)

‡‡ *Εκκλησιαστικὴ ἱστορία*. Bunsen's Hippolytus.

§§ Even the curious tickets issued by the martyrs in prison,—"Admit such a person and all his family to communion,"—are copied; so are private letters bearing on the affairs of the Church, like those of Lucianus and Celerinus.—See *Cyprian's Letters*.

new Ark of Noah, without which all perish. Baptism washes away all sin; laying on of hands confers the Holy Ghost; excommunication deprives of all hope of heaven. In wielding this last great weapon of the hierarchy, greater or less severity is applied, according as a high and statesmanlike policy judges best for the interests of the Church. In the churches there is a lofty altar,* where a consecrated priest offers the body and blood of Christ under the forms of bread and wine. There are prayers and praises and Scripture lessons; but besides these there is no public teaching, nor will there be for 200 years to come, till the days of Leo the Great.

• This change, which has induced some to treat the Cyprian correspondence as a palpable anachronism, and to reject it on that ground as the fiction of a later age, finds a ready explanation when we learn that, in the course of the hundred years between Justin and Cyprian, Christianity had passed from the Greek into the Roman population, and from the lower class into the higher. In Justin's days, the Church at Rome had been composed of Greek slaves, Greek handicraftsmen, Greek money-changers,—a few Greek philosophers, whom it valued highly; while it proscribed Greek actors, and gave no commissions to Greek artists. In the days of Cyprian, it numbered among its members Roman lawyers and statesmen; and most probably men who had been Roman priests.

When Dr. Milman says that Africa, not Italy, was the birthplace of Latin Christianity, we think that he rather overstates the case. A presbyter of Carthage was, indeed, the first great Latin writer, and published his works at a time when the ablest Roman theologian was writing in Greek: and a bishop of Carthage was the first great Latin prelate. It is also in the works of these two writers that we gain the first clear view of Latin Christianity; but in the letters of Cyprian we find the state of things in the two cities identical; and probability would lead us to suppose that Latin Christianity grew up coincidently at each place, or perhaps first at Rome. No city in the empire resembled Rome so closely as Carthage. It was a new colony planted by Julius Cæsar, on a site which had been deserted since the last Punic war, with a new military population, most probably to a great extent Italian. Its corn-trade, the most active branch of Roman commerce, produced a constant intercourse with the capital. Everything that interested Rome—news, fashions, literature, philosophy, religion, could not fail to arrive at Carthage within a month of publication. It was, in fact, to Rome what Sydney and Melbourne are to London, only

* *Altare.* The word was confined to the elevated altars of the higher gods.

with a shorter sea-passage intervening. Roman and Punic Christianity must have grown side by side.

Dr. Milman thus describes the first Christianity that existed at Rome, before the introduction or preponderance of the native Roman element :—

“For some considerable (it cannot but be an indefinable) part of the three first centuries, the Church of Rome, and most, if not all the churches of the West, were, if we may so speak, Greek religious colonies. Their language was Greek, their organization Greek, their writers Greek, their Scriptures Greek: and many vestiges and traditions shew that their ritual, their Liturgy, was Greek. Through Greek the communication of the Churches of Rome and of the West was constantly kept up with the East; and through Greek every heresiarch, or his disciples, having found his way to Rome, propagated with more or less success his peculiar doctrines. Greek was the commercial language throughout the empire; by which the Jews, before the destruction of their city, already so widely disseminated through the world, and altogether concerned in commerce, carried on their affairs. The Greek Old Testament was read in the synagogues of the foreign Jews. The churches, formed sometimes on the foundation, to a certain extent on the model of the synagogues, would adhere for some time, no doubt, to their language. The Gospels and the Apostolic writings, so soon as they became part of the public worship, would be read, as the Septuagint was, in their original tongue. All the Christian extant writings which appeared in Rome and in the West are Greek, or were originally Greek, the Epistles of Clement, the Shepherd of Hermas, the Clementine Recognitions and Homilies; the works of Justin Martyr, down to Caius and Hippolytus the author of the Refutation of all Heresies. The Octavius of Minucius Felix, and the Treatise of Novatian on the Trinity, are the earliest known works of Latin Christian literature which came from Rome. So was it too in Gaul: there the first Christians were settled, chiefly in the Greek cities, which owned Marseilles as their parent, and which retained the use of Greek as their vernacular tongue. Irenæus wrote in Greek; the account of the Martyrs of Lyons and Vienno is in Greek. Vestiges of the old Greek ritual long survived not only in Rome, but also in some of the Gallic churches. The Kyrie eleison still lingers in the Latin service.”—Vol. i. pp. 27-29.

We may trace, to a certain extent, the progress both of the change in nation, and of that in rank.

In the apostolic age, there were probably no Romans at all in the Church of Rome. More than three-fourths of the persons named in the New Testament, as resident in that city, have Greek names,* and it is probable that most of those whose

* Paul salutes twenty-six persons at Rome: of these, six have Latin names; and the only two among these of whom we know anything are a Jew and Jewess, Aquila and Priscilla.

names are Roman were either Greeks or Hellenic Jews, as, with the exception of the centurion Cornelius, not one of the Christians with Roman names, on whose history the New Testament gives us any information, was of Roman origin. Among the bishops of Rome in the two first centuries, but three have Roman names, (singularly enough, three epithets which afterwards became imperial titles, Clemens, Pius, Victor :) of these, it is nearly certain that Clemens was a Greek, like his namesake of Alexandria; of Pius we know nothing; Victor's recorded acts seem almost sufficient to prove him a Roman. In the time of Hippolytus, we find the Church apparently in a state of transition. Its leading characters are still Greek: the elected bishop, and his patron the banker, the defeated candidate and chief theologian of the day, are all of that nation. Greek controversies on the nature of our Lord and on the Trinity occupy the public mind, though more practical Latin ones, on admission of penitents and restrictions on marriage, are beginning to draw attention.* In Cyprian's writings we have noticed hardly any trace of Greek influence. Among his letters is one from Lucianus of Carthage to Celerinus of Rome, containing twenty-eight salutations of persons living at the latter city, amongst which are only two Greek names. Yet that influence must have subsisted for many years longer. The oldest existing epitaphs in the catacombs, few of which are supposed to be earlier than the end of the third century, are, many of them, in Greek, and (a curious proof of the gradual latinization of a Greek population) some of the Greek epitaphs are written in Latin letters, and some of the Latin in Greek ones.†

The progress of the faith among the higher classes can be traced somewhat more clearly. Eusebius points to the time of Commodus (A.D. 190) as the epoch when Christianity first began to make decided progress among the upper classes at Rome;‡ and his testimony is confirmed by profane history and by Hippolytus. Marcia, the concubine of Commodus, is the first Christian whom we find in influential connexion with the head of the empire: and the name of Eclectus, her fellow conspirator, has a very Christian sound. Tradition places most of the succeeding emperors in some connexion with Christianity. Septimius Severus is said to have been cured of a disease by receiving unction from a Christian.§ Caracalla may have been the first prince in whom an over-religious education produced its usual fruits,

* *Latin Christianity*, vol. i. pp. 40, 45.

† The following curious specimens of each kind are from Maitland's Church in the Catacombs: BENE MEFENTI †IAIE ΘΕΟΔΩΡΕ ΚΤΕ ΒΙΤ ΜΗΘΥΝΙ ΔΙΗΣ XVIII.—PRIMA IRENE SOE.

‡ Eus. v. 21.

§ Tertull. ad Scapulam, c. 4.

early amiability and tenderness of conscience, without that free judgment and self-deciding will, and sense of personal responsibility, which alone can produce upright action amidst the temptations of power.* Julia Mamaea, perhaps the last good mother of Pagan Rome, was the admiring hearer of Origen. Alexander Severus may have owed his pure morals and gentle temper, if not his activity in public life, to the influence of his doctrine who shared with Abraham, Orpheus, and Apollonius of Tyana the worship of his domestic chapel. The Emperor Philip is claimed by early writers as a Christian.† The palace of Valerian, till the time when he became a persecutor, is said to have been full of Christians.‡ These detached notices suffice to prove the progress of Christianity in the high society of Rome in the period between Justin and Cyprian.

When Christianity thus reached the Roman population it encountered a people of stronger nature and greater qualities than any that had yet embraced it. The Roman mind was essentially practical. Its natural element was public business in every branch,—legislation, government, legal practice, and war. Its rigidly conservative tendency was curiously exemplified by its exalting the principle of demarcation into a god (Terminus.) Habitual deference to authority prevailed in both ecclesiastical and civil courts: in each a long succession of judgments of ancient magistrates, treated with the reverence of laws, attested its respect for precedent and antiquity. This practical spirit, and conservative tendency, and deference to authority, extended to the religion, the peculiarities of which throw so much light on those of Latin Christianity, that we shall devote a few sentences to the consideration of them.

Polybius, though himself an unbeliever, attributes to the national religion the strength of the Roman state and the irresistible progress of its armies; and commends the consummate statecraft of those who invented it with a view to political organization and national power.§ Nor was he mistaken about its strength, although his view of its origin was neither philosophical nor true. Roman religion, both in the simplicity of its faith, and in its practical morality and power, stood far above any religion of the ancient world, except the then almost unknown Jewish one. It was a Polytheism, but one that had not receded far from the worship of one God. An instinctive feeling of Mono-

* *Laete Christiano educatus*, Tertull. ad Scapulam, c. 4.

† *Eus. H. E. vi. 34.*

‡ *Dionys. Alex. ap. Eus. H. E. vii. 10.*

§ Polybius, vi. 56, in Hartung's *Religion der Römer*, to whom the writer of this article wishes to acknowledge his obligation for most of his information respecting old Roman religion.

theism dwelt on the Roman mind even to the latest times, so that two Latin Apologists could appeal to the popular language respecting God, as a proof that the soul of man was naturally Christian.*

When the Roman took leave of his departed parent or friend, his *Ave Vale* did not mean Farewell for ever. He believed in a world below, shadowy and undefined, which was the dwelling of the dead, yet from that world their influence and presence extended up to this. He who had done well became a *Lar*, a being of a spiritual nature, possessed of some of the attributes of divinity, to whom it was right to offer sacrifice, and was present around the scenes and places that he had loved on earth, happy himself and conferring happiness on others. The evil became a *Larva*, hideous, restless, and unhappy, inflicting terror and misery on those who had displeased the gods. The divine spirits of the dead were honoured with sacrifices and cheered with festive funeral banquets. The living at times asked them for their prayers.† The great and distinguished among them received still higher honours, and were supposed to possess more considerable powers. They protected travellers; sent favourable winds to voyagers by sea; and acted as guardians of their native cities. Their sepulchres were sacred, and became the scenes of worship; and their power was supposed to be most intense around the places where their remains were laid.

The religion was present everywhere. In the private house, the household gods stood by the hearth, which served as a domestic altar, and was the centre of the sacred family ties, nowhere so sacred as in ancient Rome. Each meal began with a sacrifice of a portion of the food provided. At intervals along the wayside the traveller passed a chapel of the *Lares*: and other such were built in clearings of the woods, or at the source of fountains: in the towns and villages there were temples with regularly appointed priests and stated services. Wherever an image was passed it was saluted with a respectful obeisance: the feet and hands of many were worn away by the kisses of the devout: votive offerings in the temples attested the cures believed to be wrought by their power.

The worship was strictly and minutely ceremonial. Each time and place of worship, each gesture of the officiating priest or worshipper was minutely prescribed; and any omission or

* A noble passage of Tertullian, (Apolog. 17 :) "*Deum nominat, hoc solo nomine, quia proprio Dei veri: Deus magnus, Deus bonus, et Quod Deus dederit, omnium vox est. Judicem quoque contestatur illum, Deus videt, et Deo commendo, et Deus mihi reddet. O testimonium animæ naturaliter Christianæ.*" The passage is partly copied by Minucius Felix.

† Jam prece Pollucis, jam Castoris implorata. Catull. lxxviii. 65. See Hartung, i. 44.

mistake was looked upon as a grave fault and an unlucky omen. The prayers were chiefly liturgical. The priest recited the ancient form, and the worshippers, kneeling or sitting on the ground, and facing eastward towards the image of the god, with anxious care repeated it after him. These formularies were in ancient Latin, in some cases so ancient that in the time of Cicero it had become an unknown tongue, and the meaning a subject of curious and doubtful study. The priest had no office of religious teacher, nor any duty besides the decorous performance of ritual ceremonies.

As in all ancient nations, the civil and religious societies,—the State and Church, as we should say,—were one, and schism was treason. Every function of this Church-State was directed by religion. The senate could not sit except in a temple: all its deliberations were preceded by sacrifice: and a decree passed in unconsecrated ground was void. All the magistrates were in some degree religious personages, but those who had the control of the national worship were held in the greatest respect of all. They constituted an organized pontificate, and acted as a spiritual tribunal, with power to pronounce authoritative declarations of the divine will. The progress of public business could be delayed by the declaration of the augurs, that the omens declared the gods to be unpropitious. The decisions of successive pontiffs, on questions of ritual worship, had been gradually formed into a collection or code, called the *Jus Pontificium*, the first Roman canon law. These judgments related to practical points only, as there was no religious doctrine to be the basis of doctrinal decrees.

When Christianity reached Rome, belief in this religion was dead, at least among the higher classes, and the morals founded on that belief decayed. But the organized hierarchy and the ritual worship still existed unaltered; and the fundamental ideas of the religion were the native growth of the national mind. It is not strange that immediately after the entrance of Romans into the Church, we should find a hierarchy developed, and a ceremonial spirit introduced; nor that the other religious ideas and practices of ancient Rome should have entered one by one, and produced their counterparts in Latin Christianity.

Organization and government were the talents of ancient Rome; and a strongly organized form of government is its characteristic legacy to Christianity. The Papacy is a Latin institution,—the last and greatest creation of ancient Rome. It is true that its time of greatest actual power was the Middle Ages, and that the mediæval idea of feudal sovereignty was the most powerful engine in the hands of a Hildebrand and an Innocent III. But this idea was foreign, and has proved only

temporary. The feudal suzerain has departed, while the Pontifex Maximus is still in life and vigour.

The cause of the rise of the Papacy was the imperial greatness of the city. Rome was universally acknowledged to be the Queen and Mistress of the World. No epithet was thought too splendid for her,—the most Beautiful of Things, the House of the Gods, the Head of the World, were amongst her titles. Before the advent of that power that strengthened her for a new empire, she had received from heathen poets that title of the Eternal City, which Christian Fathers rejected as the Name of Blasphemy, and the Mark of the Beast. It is impossible to exaggerate the height at which Rome stood above all the other cities of the world. But while the mere position and rank of their city could not fail to place the Roman Pontiffs first, the events of history, and their own greater, or at least more practical, ability conspired to favour their pretensions. Let us hear Dr. Milman on the causes of the rise of the Papacy:—

“ In the West, throughout Latin Christendom, the Roman See, in antiquity, in dignity, in the more regular succession of its prelates, stood alone and unapproachable. In the great Eastern bishoprics, the holy lineage had already been broken and confused by the claims of rival prelates, by the usurpation of bishops, accounted heretical, at the present period Arians or Macedonians, or Apollinarians, later Nestorians or Monophysites. Jerusalem had never advanced that claim to which it might seem to be entitled by its higher antiquity. Jerusalem was not universally acknowledged as an Apostolic See; at all events, it was the capital of Judaism rather than that of Christianity; and the succession, at the time of the Jewish war, and during the period of desolation to the time of Hadrian, had been interrupted, at least in its local descent. At one period Jerusalem was subordinate to the Palestinian Cæsarea. Antioch had been perpetually contested; its episcopal line had been vitiated, its throne contaminated by the actual succession of several Arian prelates. In Alexandria the Arian prelates had been considered lawless usurpers: the orthodox Church had never voluntarily submitted to their jurisdiction; and Alexandria had been hallowed as the episcopal seat of the great Athanasius. But Athanasius himself, when driven from his see, had found an hospitable reception at Rome, and constant support from the Roman bishops. His presence had reflected a glory upon that see, which, but for one brief period of compulsory apostasy, had remained rigidly attached to the orthodox Trinitarian opinions. Constantinople was but a new city, and had no pretensions to venerable or apostolic origin. It had attained, indeed, to the dignity of a patriarchate, but only by the decree of a recent council; in other respects it owed all its eminence to being the prelacy of New Rome, of the seat of empire. The feuds and contests between the rival patriarchates of the East were constantly promoting the steady pro-

gress of Rome towards supremacy. Throughout the fierce rivalry of Alexandria and Constantinople, the hostilities which had even now begun between Theophilus and Chrysostom, and which were continued with implacable violence between Cyril and Nestorius, Flavianus and Dioscorus,¹ the alliance of the Bishop of Rome was too important not to be purchased at any sacrifice; and if the independence of the Eastern churches was compromised, if not by an appeal to Rome, at least by the ready admission of her interference, the leaders of the opposing parties were too much occupied by their immediate objects, and blinded by factious passions, to discern or to regard the consequences of these silent aggressions. From the personal or political objects of these feuds the Bishop of Rome might stand aloof; in the religious questions he might mingle in undisturbed dignity, or might offer himself as mediator, just as he might choose the occasion, and almost on his own terms. At the same time, not merely on the subject of the Trinity, had Rome repudiated the most obnoxious heresy; even on less vital questions, the Latin capital, happy in the exemption from controversial bishops, had rarely swerved from the canon of severe orthodoxy; and if any one of her bishops had been forced or perplexed into a rash or erroneous decision—as Liberius, during his short concession to semi-Arianism; or, as we shall see before long, Zosimus to Pelagianism; and a still later pope, who was bewildered into Monophytism, their errors were effaced by a speedy, full, and glorious recantation.”—Vol. i. pp. 84, 85.

We must notice, at the conclusion of the above able, and, for the most part, true paragraph, a curious instance of the effect that admiration of a great subject produces on its historian. History, even Dr. Milman's own, has preserved no record of the recantation of Liberius; and, as we shall shortly see, no recantation could be more inglorious than that of Zosimus. But the general truth remains, that the *political* wisdom of Rome shone brightly in contrast with the eastern churches, both in the choice and in the conduct of her bishops. At Constantinople the clergy or the Court (whichever influence might for the time predominate) elected the men whose shining talents would adorn the capital, or gratify the prevalent taste for ecclesiastical oratory: such men they found in Gregory of Nazianzum, Chrysostom, and Nestorius. The fiery Alexandrians desired a champion of indomitable courage and burning zeal, who would live and fight, kill or die, for the favourite dogma; and they found four representatives of themselves, in a descending scale of Christian spirit and moral goodness, in Athanasius, Theophilus, Cyril, and Dioscorus. Antioch, from some cause to us unknown, though it supplied two shining lights to the Church of Constantinople, placed on its episcopal throne no man of power or distinction, except the mythical Ignatius, and the heretical Paul of Samosata. But Rome elected, as of old, with a view to empire. She

had no ecclesiastical orators. She had few theologians, and of those she possessed she elected none. In her earliest age she set aside her ablest writers, Hippolytus and Novatian. In later times the splendid abilities, unequalled attainments, and ascetic piety of Jerome, could not persuade the pontifical electors to place their Church at the mercy of his keen resentments, and susceptible vanity, and intemperate zeal, and unbridled tongue. In Leo the Great they chose at last their ablest theologian; but theology was his accident; his essence was statesmanship. Nor was it his theological ability or monastic piety, though each was the greatest in his age, that placed Gregory the Great upon the throne. In him, as in his predecessors, the practical Roman mind had sought and found a man of tried practical ability—a magistrate,* a diplomatist, and a statesman. But the contrast between Greek and Roman administration of a great see is presented to us most strikingly on the Roman throne itself, in the Pontificates of Zosimus and Leo.

Zosimus, a Greek, ascended the Papal throne on the sixth of January, A.D. 417. His reign fell in an important period when the relations of the provincial Metropolitans to the Roman See were yet unsettled, and a subject of frequent contests; and it began at a moment when the Latin mind was for the first time profoundly agitated by a speculative question. The question was that momentous one which has in every age inspired and agitated the most deeply religious minds of the Western Church—the relation between the all-powerful grace of God and the free will of man. Pelagius, and his disciple Cælestius, having maintained man's freedom to an extent offensive to the religious feeling of the age, had been condemned and excommunicated by the late Pope, Innocent I., who specified, in his letter announcing this decree, two propositions as branded with anathema; the first, that a man does not need the grace of God; the second, the very insane* idea, as Innocent declared it, that unbaptized infants can be saved. In the teeth of this decided act of his predecessor, Zosimus began his administration by the most impolitic step that can possibly be ventured by one who wields an authority founded only on opinion. Having received a confession of faith addressed by Pelagius to his predecessor, in which (so far as we can judge from the fragments of it that remain†) the first article condemned by Innocent is denied, but certainly not the second, he re-heard the cause, and pronounced the proceedings of a former Pope to be so completely null and void, that the persons excommunicated by him had never been separated from the body of the Church and from the Catholic

* *Perfatum.*

† *P. Constant Epist. Pontif. Rom.*

truth. There was, however, among the opponents of Pelagius and Cælestius, a man of greater ability, of deeper religious conviction, and of personal character so venerated, as to invest him with greater spiritual influence than even higher office could confer on the bishop of Rome. Augustine, with public opinion on his side, and backed by the votes of 200 zealous African bishops, was for the time the most powerful man in Latin Christendom. Through his influence the opposition to the Pelagian heresy was soon strengthened by the adhesion of the emperor Honorius. A rescript appeared in the name of one of the feeblest and most priest-ridden of sovereigns, in which men and opinions pronounced orthodox by the Pope were declared heretical. Zosimus could not resist so powerful an opposition. He first issued a very ambiguous letter, in which, after a long and irrelevant exordium, on the authority of the Roman See, he states that those were mistaken who supposed that he had entirely adopted all the opinions of Cælestius. This was soon followed by his *Epistola Tractoria*, now lost, except a few fragments, in which, after a detailed exposition of the doctrine, he condemned those whom he had a few months before declared orthodox, a condemnation which he compelled all the Italian bishops to subscribe.

It is unfortunate for the memory of this Greek prelate, that history places in his immediate proximity one of the ablest and most magnificent of Roman ones. After the two short reigns of Boniface and Celestine, the unanimous suffrage of the priesthood and people of Rome placed upon the throne by far the ablest man of the age—Leo the Great. Nothing is known of the early years or private life of this great man, except that he was a Roman of Tuscan blood. He is one of those whom one can scarcely imagine in private life. No allusion to family relations—no sign of individual interests—no expression of tender feelings—no trait of human weakness—no utterance of subjective religion, appears in his history or his writings. He stands before us as a being made only to command. His letters are official documents; his sermons short matter-of-fact expositions of doctrine or of duty, delivered as by one who never felt a doubt of his own transcendent powers, or, as he himself expressed his magnificent self-confidence—of Peter who spoke and acted by him.* Dr. Milman has well compared him to a Roman dictator, for he was full of the spirit of old Rome.

“Leo was a Roman in sentiment as in birth. All that survived of Rome, of her unbounded ambition, her inflexible perseverance, her

* “Cum ergo cohortationes nostras auribus vestrae sanctitatis adhibemus, ipsum (viz. Petrum) ejus vice fungimur, loqui credite; quia et illius vos affectu movemur, et non aliud vobis quam quod docuit prædicamus.”—*Sermon on the Second Anniversary of his Accession*.

dignity in defeat, her haughtiness of language, her belief in her own eternity, and in her indefeasible title to universal dominion, her respect for traditionary and written law, and unchangeable custom, might seem concentrated in him alone . . . The haughtiness of the Roman might seem to predominate over the meekness of the Christian. Leo is indignant that slaves were promoted to the dignity of the sacerdotal office; not merely did he require the consent of the master, lest the Church should become a refuge for contumacious slaves, and the established rights of property be invaded, but the baseness of the slave brought discredit on the majesty of the priestly office.”—Vol. i. pp. 180, 181.

The other Roman bishops of the period seem to have been men of the same type as Leo, though none of them equal to him in power. It is not surprising that a Church administered by men filled with a grand idea of Roman greatness, and though zealous for Christianity, yet still more patriotic for Rome, trained in the school of Roman policy, and determined, in its commanding spirit, to bear down resistance and dissent, should raise the influence of the great institution, of which they formed a part, faster and more surely than the fervent and excitable, yet hasty and inconsistent orientals. The opposition was that of policy against cunning, forethought against precipitation, calmness against excitement, strength against weakness.

But the most interesting subject of inquiry, in the history of native Latin Christianity, is, as in every history, its inward life, the moral and religious condition of its people. For this we have to refer again to Dr. Milman's previous work, which contains several chapters that are absolutely necessary to render his present one complete. Two periods may be noted, divided by that most momentous revolution that Christianity has ever experienced—the conversion of Constantine. We may draw some very pleasing traits of the earlier period from the most ancient monuments in the catacombs. The following translation of a passage in M. d'Agincourt, is selected from Dr. Milman's earlier work, as a very beautiful representation of its most interesting feature:—

“The catacombs destined for the sepulture of the primitive Christians, for a long time peopled with martyrs, ornamented during times of persecution, and under the dominion of melancholy thoughts and painful duties, nevertheless everywhere represent, in all the historic parts of these paintings, only what is noble and exalted, and in that which constitutes the purely decorative part only pleasing and graceful subjects—the images of the good shepherd, representations of the vintage, of *agape*, with pastoral scenes: the symbols are fruit, flowers, palms, crowns, lambs, doves; in a word, nothing but what excites emotions of joy, innocence, and charity. Entirely occupied with the celestial recompense which awaited them, after the trials of their

troubled life, and often of so dreadful a death, the Christians saw in death, and even in execution, only a way by which they arrived at their everlasting happiness; and far from associating with this image that of the tortures or privations which opened heaven before them, they took pleasure in enlivening it with smiling colours, or presented it under agreeable symbols, adorning it with flowers and vine leaves; for it is thus that the asylum of death appears to us in the Christian catacombs. There is no sign of mourning, no token of resentment, no expression of vengeance; all breathes softness, benevolence, charity."^a

We believe that the daily danger and frequent martyrdoms mentioned in this extract are chiefly the creations of the pious fancy of the succeeding age, which loved the horrible as much as its predecessor did the happy and peaceful. The question respecting the frequency of martyrdom is an old one, and too long for discussion in this place; but we must express our belief that the Christians of Rome only suffered severely at three periods; the reigns of Nero, of Decius and Valerian, and, lastly, of Diocletian. At other times they enjoyed peaceful and happy lives, and the absence of expressions of suffering and records of martyrdom on their tombs, is the effect and token of their outward as well as inward peace. There is also to be observed on the most ancient monuments, which alone belong to this period, a remarkable absence of everything that we now call Romish: hardly any representations of Saints, or of the Virgin, or even of the Saviour, except in the symbolical form of a shepherd with a lamb; no allusion to enforced celibacy, or any of the ascetic notions of later times. And yet, along with this, there is a remarkable absence of distinctive Christian ideas, and very little appearance of Scriptural knowledge,—deficiencies which may perhaps be traced to the absence (already noticed) of public preaching, and may have rendered the introduction of Heathen ideas and practices in the succeeding age more easy. Even the Heathen ascription to the *Dii Manes* (D. M.) maintains its ground on many Christian tombstones, the meaning of the initials being very probably quite forgotten.† The sectaries of the middle ages, who used to brand Constantine's cotemporary, Pope Sylvester, with the name of Antichrist, showed no untrue appreciation of the greatness and evil of the change that took place in his day. Three foreign elements almost immediately entered the Church—the ideas and practices of Heathenism, the low and corrupt morals of the world, and, as a reaction from the latter, the ascetic morality of the East. The Church passed almost at one step from the close of her bitterest persecution to the height of power. The temptation was too strong for her, and the persecuted became at once a persecutor. It now

* M. d'Agincourt *Histoire de l'Art*, in Milman. *Hist. of Christianity*, iii. 515.

† Maitland's *Church in the Catacombs*.

became the interest of the worldly and the wicked to adopt the name of Christian: those who came to ask for baptism were received with fatal facility; they brought their lusts and their ambition with them; and ere long the Church contained within herself the whole of that world that knows not God. Her bishoprics became splendid prizes; to which ambitious men aspired by bribery and violence: as early as 367 A.D., blood had been shed in the streets and churches of Rome, in a contested election for the bishopric. There is no vice of the present age, either in clergy or laity, that did not appear already in the Christians of Rome as painted by Jerome. This decay of morals, or rather introduction of Heathen morals into the Church, (for although the standard of morality within the Church declined, that of Rome as a whole was much elevated by the influence of Christianity,) prepared the way for the introduction of that exaggeration of Christian virtue, which is always most eagerly accepted by the better part of mankind when vice is rampant. When married life is corrupt, we hear the praises of virginity: when the tone of society is low, convents are filled with those who are weary and disgusted with the world: when riches are found only to minister to vice and luxury, noble minds fall in love with poverty. In this period Rome produced a group of female characters, which completed her cycle of extremes in virtue and vice. Her myths had told of a Lucretia, the model to generations of irreproachable matrons of wedded chastity, quietness, sobriety, and industry: her imperial times had produced a Messalina as the heroine of immeasurable vice: and now Christianity begot on her corrupted stock heroines of ascetic virginity and widowhood. She produced an Asella, who made herself a hermitage in Rome, where she lived in perfect solitude from her tenth year, clothed in sackcloth, fasting often for three or four days, and in Lent seven, and refusing even to see her virgin sister; and a Paula, who abandoned the children that God had given her in order to live under Jerome's direction a life of spiritual selfishness in a convent at Bethlehem; and an Eustochium, whose virgin heart the same father soothed with erotic meditations on a heavenly bridegroom. At the same period, the peaceful and joyful feelings that had distinguished the earlier Christians seem to have died away: and sanguinary martyrdoms become the tales most attractive to the popular mind. When multitudes of half-converted Pagans entered into the Church, it could not fail that they would bring Pagan ideas and customs with them. The sublime and fundamental truth of the unity of God receded. The self-same offices, the self-same place in the popular mind, the self-same acts of outward devotion, that had belonged to the inferior gods and heroes of the old faith, were transferred to the

saints of the new.* Peter and Paul became the *Lares publici* of Rome, and their tombs were visited as that of Romulus had been before. Miracles were wrought in Christian churches as of old in Pagan temples: and votive tablets testified to the power of the virgin and the saints, as they had before to that of Apollo, or Æsculapius. It is not illiberal, nor ought any member of the Roman Church to be offended when we say, that the popular religion of Rome became, what it has ever since been, a Polytheism.† The position of the saints was indeed mediatorial, and their power derived; but such had also been those of the inferior deities of Heathenism. But it would be the height of illiberality were we to dissimble or deny how much higher and nobler was this new Polytheism, than the more ancient one. Though apotheosis had been borrowed from the Pagans, yet a higher, a Christian principle regulated its use. In former times fortitude and uprightness, and other civic virtues, caused men to be numbered among the gods.‡ Now, though mere tenacity of purpose in extremity of torture or peril still retained a value far beyond its due, and martyrdom was held to cover a multitude of sins, yet it could not invest men with the honours of divinity, unless combined with the fame and often the reality of holiness. Canonisation must ever be injurious to true Christian virtue; because it exalts those whose great qualities are displayed before the world above those whose good ones are known to God alone; and because it sets a prize of earthly ambition, although a posthumous one, before those who should be content with one in heaven; and it is also untrue, because it is a fallible judgment pronounced by men, who do not know the secrets of the heart, on a fact that none but the Searcher of the heart can

* Paulinus addresses his Saint Felix. "Qui lumine Christi, cuncta et operta vides, longeque absentia cernis. Positasque tuorum Ante tuos vultus animas vectare paterno Ne renuas gremio Domini fulgentis ad ora. Posce ovium grege nos statui Da currere mollibus undis, et famulis famulos a puppi suggerere ventos."

† "Christ, in rising, raises his saints with Him to the right hand of power. They become instinet with His life, of one body with His flesh, sons, kings, gods. He is in them, because He is in human nature, and he communicates to them that nature deified by becoming His, that it may *deify* them."—*J. H. Newman's Essay on Development*, p. 402. He heads several pages *Deification of the Virgin Mary; Deification of the Saints*. Either this is a Polytheism, or the old Roman religion was gone.

‡ Quæ Phæbo pater omnipotens, mihi Phœbus Apollo prædixit. Virg. *Æn.* iii. 251. Παρὰς παφῆρος ἰστί λολίης Διός. *Æschl. Frag.*

Justum, ac tenacem propositi virum
Non civium ardor prava jubentium,
Non vultus instantis tyranni
Mente quatit solida, . . .

Si fractus illabatur orbis,
Impavidum ferient ruinae.
Hæc arte Pollux, et vagus Hercules,
Enisus arces attingit igneus.

know: but we must not deny that it filled the second Roman Pantheon with nobler gods and demigods than those of the best and most serious Paganisms. It is an irksome task to find faults in any, and gladly would we omit it in the case of the heroes of Papal Rome, if she were but content to ask us to admire them as good men, instead of worshipping them as gods. Then we might be blind to their faults, and speak of their virtues only. Even now we would only point out the one primal source of all their failings,—that while they loved God's moral law much, they loved the Church on earth—and thought that God loved it—more. Thus, when the two seemed opposed, the interest of the Church, and the keeping of the commandments, the former was preferred. When an Ambrose ventured to exhibit a false miracle, or a Leo poured forth his bitterness on feeble and harmless sectaries, or a Gregory flattered the evil deeds of a Phocas, perhaps even (it is possible) when a Hildebrand trampled on the fallen majesty of one of those powers who, his own theology taught, were ordained of God, they may have thought they did it “in majorem Dei gloriam.” And while we gladly acquit them of wilful wrong, we see the cause of their error in their sin of Church-idolatry. They knew indeed that God loved the lowly virtues of speaking truth, and loving mercy, and walking humbly before him; but they thought that he loved still better a hierarchy of patriarchs, metropolitans, bishops, priests, and deacons, organized into a grand external unity, and bearing sway in the world. This was the source of their partial blindness and of endless other miseries to mankind.

With Gregory the Great, (A.D. 604,) the characteristic period of Latin Christianity ends.

It had, under the Roman empire, consolidated a form of government; collected a code of laws; accepted a system of abstract doctrine, the work of Orientals; and embodied in its ecclesiastical life ideas, rites, and practices, the native growth of Italy. It now proceeded to impose these, in a mass, upon nations of other blood and differently constituted mind. It performed its task with that wonderful power of assimilation which equally characterized the elder and the younger Rome: yet, while it did so, it incorporated not a few of the national peculiarities of those whom it embraced; and became, for the future, Germano-Latin rather than simply Latin Christianity. The pontificate of Gregory I. witnessed the beginning of a chain of events the end of which is still in the distant future. The foreign power conquered the Teutonic nations. It imbued them with a Christianity such as itself possessed,—the eternal religion of the Gospel, systematized by Greek theology, corrupted by

Italian superstitions, organized by Roman statesmanship, and administered by Roman policy. Long ages followed, in which these nations submitted to the yoke, and were educated, from generation to generation, in a system, much of which was foreign and artificial. At length their independent life gradually awakened, manifesting itself by efforts to draw by their own free thought, from the original documents of Christianity, doctrines which their own hearts recognised as the original truth, and practices congenial to their own minds and feelings;—efforts at last resulting, in the sixteenth century, in a spontaneous and successful insurrection, yet never thoroughly successful, because met at every step, and in countless forms, and as much within their own heart as in the world around them, by the organizing and commanding spirit of old Rome. Remaining history chiefly informs us of the efforts of the Roman power to regain its ground,—efforts, strong in the strength of the old organization; still characteristically Roman, successful wherever the native Teutonic belief is dead or sleeping, but doomed to be swept away again whenever and wherever it revives. Our own age awaits the solution of the problem, whether the Teutonic mind be yet free enough from the chains in which Gregory and his successors bound it, to reject, *in toto*, the binding authority so long asserted by Greek theology and Roman organization, and to accept of each only so much as accords with the simplicity and truth of Christianity in its origin, and preserves unimpaired that freedom of religious thought and action which is the birthright of man, and the dearest possession of the German and the Englishman.

We must, before we close our review, see Latin Christianity start on its enterprise of conquest. Its first expedition was to England; and its first victory in our island was the key to all the rest. Dr. Milman furnishes us with no information as to the reasons that induced that very pious but very politic man, Gregory the First, to pass over the nearer Germany, the Pagan tribes who still possessed the whole eastern bank of the Rhine, and even the northern declivity of the Alps in Switzerland and the Tyrol, and direct his expedition in preference to the shores of distant England. With his usual feeling for the poetical, he admits into his history, as the determining cause of Gregory's enterprise, Bede's pleasing story of the Anglo-Saxon children in the slave-market at Rome. We fear that this story, with all its picturesqueness, and its three beautiful puns, which every one of us has known and loved from childhood, must take its place, not among accredited historical facts, but among edifying religious fictions;—in which latter capacity may it live for ever! Bede only relates it as an *opinio majorum* current in England, without in the least vouching for its truth. Gregory's

undoubted piety would naturally have impelled him to seek the conversion of the heathen ;—but no Roman ecclesiastic was ever free from views of policy ; and it is in considerations of policy, that we must seek the cause of the particular direction taken by his enterprise.

There were already in the British islands two things, which have ever been to Roman bishops far greater eye-sores than any Pagan nation,—two free national churches, in doctrine, in practice, and in feeling, dissentient from and independent of Rome. The Church of Wales had no correspondence with Rome at all : that of Ireland, in all its intercourse, maintained a dignified but respectful independence. Moreover, this poor and distant Irish Church preserved more learning within the walls of its monasteries than any church of Christendom, and was the only one in that age that shewed real signs of vigorous spontaneous life. More than fifty years before, an expedition had sailed from Bangor on the Lough of Belfast, which had founded a missionary settlement in Iona, and carried Christianity to the Scots of the mainland. National antipathy towards the Saxon, as strong in the sixth as in the nineteenth century, had diverted their zeal from England ; but about the time of Gregory's accession, a body of stern and fiery Irishman, who refused to keep Easter and shave their heads in the Roman fashion, had landed in France, acquired great influence in the courts of its several kingdoms, and were already pushing their missionary enterprises deep into the forests of Alsace. The Roman would have been no Roman, and the Pope no Pope, had he not been anxious to conquer or to quell these motions of independent life.

In the last years of the sixth century, Christendom saw for the first time a Latin missionary enterprise. The Latin mission is one of the most characteristic features of the form of Christianity which now occupies our thoughts, and must be shortly described. It was not a body of men who went forth because they had a word of good tidings, and their heart was hot within them till it was spoken : nor was it one that trusted to the force of that word alone, and so cared only to speak it clearly, and let it work its own work upon the heart. Such had been the first Apostles ; and such were the simple monks of Ireland : but such was not the Latin mission. It was an organized enterprise, originated and directed by a central executive ; it was furnished, not only with the shield of faith, and the sword of the spirit, but also with a very diversified *matériel-de-guerre* of an external kind,—crosses, vestments, pictures, vessels, music ; and its members were instructed in the art of employing all these paraphernalia so as to work most effectually on the mind. Augustine was but a laggard missionary ; he had been ready to

abandon his enterprise, at the mere rumour of danger, before he had lost sight of the sunny shores of the Mediterranean : but he and his companions were well skilled in marshalling the religious procession, in directing the choir, and combining the effect of painting, sculpture, music, and histrionic gesture in an imposing dramatic arrangement of the scenes and acts of worship, and in the use of those ascetic observances, made known but not displayed, which astonish and awe the sensual barbarian. The common-sense of the Anglo-Saxon was curiously displayed when he refused to meet them except in the open air : he may have known, as well as we, that it is easier to produce a false effect within the four walls of a building, than beneath the free air of heaven. He thought upon the tidings that they brought ; and we have a right to believe, that it was not the dramatic scene, but the true gospel, that at last conquered him. We insert Dr. Milman's description,—

“Augustine and his followers met the king with all the pomp which they could command, with a crucifix of silver in the van of their procession, a picture of the Redeemer borne aloft, and chanting their litanies for the salvation of the king and of his people. ‘Your words and offers,’ replied the king, ‘are fair ; but they are new to me, and, as yet, unproved. I cannot abandon at once the faith of my Anglian ancestors.’ But the missionaries were entertained with courteous hospitality. Their severely monastic lives, their constant prayers, fastings, and vigils, with their confident demeanour, impressed more and more favourably the barbaric mind. Rumour attributed to them many miracles ; before long the King of Kent was an avowed convert ; his example was followed by many of his noblest subjects. No compulsion was used, but it was manifest that the royal favour inclined to those who received the royal faith. . . . The Pope already contemplated the complete spiritual conquest of the island, and anticipated a second metropolitan see at York. Each metropolitan was to preside in his province over twelve bishops. . . . On the more delicate question as to the course to be pursued in the conversion of the Pagans, whether that of a rigid uncompromising condemnation of idolatry with all its feelings and usages, or the gentler though somewhat temporizing plan of imbuing such of the heathen usages, as might be allowed to remain, with a Christian spirit, appropriating heathen temples to Christian worship, and substituting the saints of the church for the deities of the heathen—was it settled policy, or more matured reflection, which led the Pope to devolve the more odious duty, the total abolition of idolatry, with all its practices, upon the temporal power, the barbarian king, while it permitted the milder and more winning course to the clergy, the protection of the hallowed places and usages of the heathen from insult, by consecrating them to holier uses ? To Ethelbert, the Pope writes, enjoining him, in the most solemn manner, to use every means

of force, as well as persuasion, to convert his subjects, utterly to destroy their temples, to shew no toleration to those who adhere to their idolatrous rites. This he urges by the manifest terrors of the Last Day, already darkening around; and by which, believing no doubt his own words, he labours to work on the timid faith of the barbarian. To Mellitus, now bishop of London, on the other hand, he enjoins great respect for the sacred places of the heathen, forbids their demolition; he only commands them to be cleared of their idols, to be purified by holy water for the services of Christianity; new altars are to be set up, and relics enshrined in the precincts. Even the sacrifices were to be continued under another name. The oxen which the heathen used to immolate to their gods were to be brought in procession on holy days; the huts or tents of boughs, which used to be built for the assembling worshippers, were still to be set up, the oxen slain and eaten in honour of the Christian festival: and thus these outward rejoicings were to train an ignorant people to the perception of true Christian joys."—Vol. ii. pp. 57-60.

Such was the genuine Latin mission. Our readers will have no difficulty in recalling the strong contrast presented by the apostolic ones: but, in order to present a cotemporary contrast, we will borrow from Bede his description of the missionary work of Aidan, one of the most noted of the Irish monks.

"He used to go in all directions through the towns and country places, not on horseback, but on foot, unless some unusual need perchance constrained him. Wherever, as he walked, he saw any either rich or poor, immediately he turned aside to them, and, if they were unbelievers, he invited them to receive the sacrament of baptism; or, if they were already believers, his custom was to strengthen them in the faith, and to stir them up by words and deeds to alms-giving and good works. So much did his life differ from the negligence of our times, that all who travelled with him, whether shaven or laymen, were obliged to meditate; that is, to employ themselves either in reading the Scriptures or in learning psalms. . . . And if it ever came to pass, which indeed was very seldom, that he was bidden to the king's feast, he came in with one clerk only, or at most two; and when he had spent a very little while in taking refreshment, he made all the greater haste to read with his companions or to pray. . . . If rich men had committed a fault, he never held his peace for reverence or fear of them, but corrected them with a sharp rebuke. . . . Of how great moderation, and of how sober a mind, he and his successors were, was proved by the house over which they had been superiors, where were found after their departure, saving only the church, the smallest buildings that might be; so small, indeed, that their needful dealings with the world could not be done in any smaller. . . . So wholly were they chastened from the plague of covetousness, that none would receive lands or possessions for the building of monasteries, unless compelled by the great men of the world."

It is one of the most singular facts of history, that these Irishmen, who were converting England and Germany, in their own plain and simple way, without connexion with Rome, or any hierarchical pretensions, were driven from all their missionary settlements by Romanized Englishmen, Wilfrid and Boniface. The first motions of native Irish religious life were independent, and sometimes decidedly antipapal; while Rome was a sacred city and a mother of the faith to the first Christian Englishmen. While England received from Rome her first lessons of Christianity, and is so far her debtor, Ireland has only received from her religious and political servitude. A bull of Pope Adrian presented her to Henry II., and laid the foundation of all her miseries. Yet now Ireland is the heartiest friend, England the heartiest enemy of the Papacy. Irish and English missionaries still confront each other all over the world, but the sides are changed: the Irish are fighting for the authority of Rome, the English for the supremacy of the Bible, and for religious liberty.

The effect of this conquest of England was to bestow on Latin Christianity the quality in which itself was wanting—a spirit of missionary enterprise. In the next great missionary, Boniface, we find Teutonic enterprise and perseverance, inspired by Celtic fervour, united in subject alliance with the organization and discipline of Rome. That fervid zeal which had inspired the Irishmen, Columba, Columban, and Ædan, spread by direct contact to the less excitable, yet more persevering Anglo-Saxons—to Willibrord and Boniface. It found in them a spirit of daring enterprise, derived from those sea-robbers from whose stock they sprung, who looked on the sea, not as a barrier, but a highway,—to whom the conflict of battle was a delight, and death in arms the proudest glory. This spirit, when inherited by men of profound religion, could not but become missionary zeal. But it found, besides, a deep sense of gratitude, and an admiring reverence, for Rome. Rome first laid her chain on Boniface, bound him by a most stringent oath of allegiance, and then sent him forth to win her subjects in the forests of Germany. He went forth at her bidding, an Anglo-Saxon in zeal, but a Roman in policy. He feared not to throw himself into the wilderness, among stubborn and treacherous savages, in real zeal for the good of their souls: he braved continually, and at last he suffered martyrdom: yet he knew also how to use adroitly the influence of princes; he scrupled not to sweep into the Church multitudes of half-converted heathens; he organized on the Roman model, and imposed on his churches the oath that he had himself taken of obedience to Rome: he quelled the independent, and persecuted the heretic in her domineering

spirit. This combination, of which he is the first example, was renewed afterwards in numberless individuals; and these, not only men of Teutonic origin, but natives of Spain, of France, and of Italy,—countries which Teutonic example and the infusion of Teutonic blood had filled with that spirit of enterprise, which, when led captive by Roman religion, formed the motive of mediæval pilgrimages and crusades, inspired no small part of the daring of Columbus and Cortez, and found its last, but not its feeblest embodiment in Ignatius Loyola and Francis Xavier.

We had hoped to have had room to trace the influence of these Latin and Teutonic elements—the Roman organization and the fresh Teutonic blood—on the doctrine and practice of the Western Church, and especially on its mightiest instrument of power—the monastic orders. But our limits are already exceeded: and we must defer the more detailed treatment of these subjects until the appearance of the next instalment of Dr. Milman's work. We will only point out at present the leading characteristics of each. In Latin Christendom doctrine has generally been kept subordinate to practice: the interesting questions of debate have been not what was to be believed, but what was to be done. The East debated for five centuries, and exhausted, to the most subtle shade of difference, the nature of the Godhead, and the manner of its union with the manhood in the person of Christ. Latin Christendom never originated a question of this kind, seldom listened to them with interest, often failed of appreciating their subtleties, yet in the end, judging without passion, and therefore with judge-like impartiality, most frequently decided right. It turned its more practical mind to practical questions: some trifling ones, such as would in ancient days have been referred to the College of the Pontifices;—the time of Easter; the shape of the tonsure; the manner of divine service; the fasts to be imposed on the people: and some more important ones, such as the merit of virginity, the restrictions to be placed on the marriage of the clergy, the mode of reconciling the penitent, the degree of reverence to be paid to the Saints. Even the one great Latin speculative question was, at the same time, deeply practical. From Pelagius and Augustine to our own age, and perhaps for many an age to come, religious men will ask with profound anxiety, If God be all-powerful, how can I be free? If I am free, as free I seem to be, how is it true that without him I can do nothing? Must I move myself? or wait until he moves me? This is speculation to satisfy a practical want, not to feed the curiosity of the mind.

Monasticism has had a strange destiny. It has cultivated forests, preserved literature, even made discoveries in science, It has produced teachers, preachers, scholars, statesmen, soldiers.

The most ardent missionaries and the most ruthless inquisitors have come out of its convents. It has been the most powerful engine ever set to work upon the world. Yet its first votaries, who sowed the little seed from which this great tree has grown, had no other idea than to leave the world entirely and for ever. Such was Antony : and such have been all its oriental disciples, as much the monks of Athos at this day, as those of Nitria in that of Athanasius. This original idea was retained for many centuries by Latin Christianity also. It was simply the desire to leave the world that led Benedict of Nursia, and Stephen Harding, and Bernard of Clairvaux into a convent. Even the organization of monks into an order, with subject monasteries, and a gradation of officers, all under a single general—the form in which they became, in after years, the regiments of the Pope's army—is no Latin invention. It was anticipated in the East by the Egyptian monk Pachomius. Latin monks, being sprung from more active races, did more work than oriental ones, but we do not see that, in the ages that preceded Francis of Assisi and Dominic, the Latin convent displayed, either in discipline or in employment, any essential difference from the oriental one. The great distinction between early Greek and Latin monasticism appears to be, that while Eastern Christendom was never able (if it attempted) to regulate the relations of the monastic bodies to the central ecclesiastical government, and so let them grow up into an independent power and a dangerous rival,—the organizing spirit of Rome assigned to them their place in the great system, and kept them in it by the strong hand of discipline. Sometimes their corporate spirit was too strong for its iron grasp : and even Jesuits have rebelled ; but in general they have proved its most devoted subjects. We believe that the great diversion of monastic zeal from self-culture to work in the world, which is indeed characteristic of the West,—but of the Germano-Latin, not the purely Latin, West, and took place involuntarily in Francis of Assisi, and with well-considered purpose in Dominic, was caused by the same universal longing for religious enterprise, which had sent pilgrims and crusaders to the Holy Land. But this point lies beyond the limit of Dr. Milman's present work : and we cannot enter into it now, although we hope to return to it hereafter.

We take leave with regret of this first instalment of a very able and valuable work. We have already mentioned two defects that we think we have discovered in it, these only affect the plan ; and are such as could be easily supplied. In other respects, it leaves us little to desire : and we feel it to be a credit both to the author, and to the country, as well as to the too

barren soil of English Cathedral establishments. Dr. Milman has many of the qualities of a great historian, and stands in the foremost rank among modern writers of Church history. In the fundamental point of all, truth of statement, founded on careful research and honest judgment, he has entirely satisfied us. In the process of investigation he is always anxious and patient, and in forming his judgments candid and impartial: often have we noticed him suppressing his verdict, where his convictions were carrying it in favour of the side towards which his sympathies inclined. His study of the times which he describes has been complete: no original source seems to have escaped the very wide range of his reading: and the opinions of modern writers, especially those of Germany, have been duly weighed, and where necessary noticed. And to this careful research and honest judgment he adds that poetic liveliness of imagination which makes each man and each period live as they pass before us. Some of his characters are beautifully drawn, and have been evidently considered, not only with the inquisitive interest of the student of human nature, but with the sympathy of an intimate acquaintance, and the charity of a Christian brother. Only in his more general views of history, while we still find much to praise, we find something to except against. Belonging, in general tone of mind, to that school which friends call liberal, and enemies latitudinarian, he attaches little importance to the minuter variations of theological opinion; and though he can appreciate in an Athanasius the heroism that can suffer and die even for a self-invented theological phrase, when deemed to embody truth, yet it is evident that the heroes of controversy have not his sympathy, and that he hates with all his heart the "*odium theologicum*." The same liberal or latitudinarian spirit is extended to differences of practice; and thus we sometimes feel inclined to ask, with reference both to doctrine and to practice, What does the author himself think right? and what true? He seems too apt to judge both with reference rather to the effect that they have produced on the world, than to the relation which they bear to abstract truth and right: so that the reader is tempted to doubt whether he thinks that there is a right and a truth at all. For example, while the papal power appears to him to be founded on error, and he is even one of those who think that its mythic founder, the Apostle of the circumcision, never visited its local seat in the chief city of the uncircumcised; yet he thinks, that "on the rise of such a power, both controlling and conservative, hung, humanly speaking, the life and death of Christianity,—of Christianity as a permanent, aggressive, expansive, and, to a certain extent, uniform system;" that "it is impossible to conceive what had been the

lawlessness, the chaotic state of the middle ages, without the mediæval Papacy;" in a word, that the very existence of what we believe to be eternal truth depended for many ages on the establishment and continuance of a fiction. Again, he believes the mythology of the middle ages to have been "a vast system moulded together out of the natural instincts of man, the undying reminiscences of all the old religions, the Jewish, the Pagan, and the Teutonic, with the few and indistinct glimpses of the invisible world and the future state of being in the New Testament;" which he admires and defends, yet not for its truth, but for "its uses, its importance, and its significance in the history of man." Once more, the opposition of Berengar of Tours to Paschasius Radbert's doctrine of transubstantiation seems to him no revolt against the truth; yet he thinks that, had it been successful, "it would have *prematurely* undermined in the hearts of men the greatest of those influences by which the hierarchy had swayed the world, and might have led, *long before Christendom was ripe for a more spiritual and intellectual religion*, to a fatal disturbance of the traditional and dominant faith." Does this mean that simple truth is fitted for the civilized only, and that error is the truth of the barbarian?—that the overthrow of error and the introduction of spiritual religion can ever be premature? If so, we must enter our protest against such philosophy.

We do so all the more earnestly, because men are not content with employing it in their reflections on the past, but apply the same principles to their conduct in the present, and their anticipations of the future. We have philosophic historians, and learned theologians, and even right reverend bishops, who no longer tell us that their doctrines are true, and must be held whatever comes, but that they are necessary for the wellbeing of times like ours. Nothing can maintain order, (they say :) nothing support the state: nothing can perpetuate this or that religious society: nothing can stave off revolution or unbelief; but a general acceptance of this or that or the other doctrine: they are necessary, whether they be true or not. This way of judging the present and the future, together with the course of conduct to which it leads, is encouraged by a philosophy, like that of Dr. Milman, which suppose, that there are periods in history to which error has been necessary and valuable. But the principle is false when applied to the past, and still more so when directed towards the future. Man has sufficient faculties for discerning what is right and true; but not sufficient for appreciating all the wants of his time, still less for forecasting the requirements of the future. That doctrine only is necessary for the individual and necessary for the age which the individual or the age, with its whole heart, believes.

ART. IV.—*The Philosophy of the Infinite: with Special Reference to the Theories of Sir William Hamilton and M. Cōusin.* By HENRY CALDERWOOD. Edinburgh, Constable & Co. 1854.

CAN GOD be known by man?—If a *negative* answer must be returned to this question, our deepest feelings are, it seems, founded on illusion, and human regard should be contracted within the limits of this earthly life. Religious belief cannot be originated when its nominal object is wholly unknown; and all the words which express what is called theological knowledge should be excluded from language as unmeaning sound. We cannot obtain such knowledge either naturally or supernaturally. Can a Being in any sense be “revealed” who is absolutely incognisable? Is not the revelation impossible, or at least incapable of being attested by evidence?—But if this result is at variance with our moral aspirations, and even with the necessities of reason, an *affirmative* reply seems on the other hand involved in inextricable intellectual difficulties. How can the infinite God be in any way an object of our thoughts? To conceive an object is in some sense to define it. Definition implies limitation, and an infinite object cannot be limited. Moreover, the unlimited Being is not only an inconceivable Being. His very existence does not logically consist with the existence of any other being besides. In every act of knowledge I must distinguish myself from the object known by me. Every object that exists must therefore be either limited, by the subtraction from it of my finite being, or, as infinite, must absorb me and all the universe into itself. An infinite Being, existing in plurality—as One among many, seems an express contradiction, while the only logical solution of the difficulty lands us in the doctrine of Spinoza. Atheism or Pantheism are thus the only alternatives, when the response to our question is logically weighed.

The mental habits of the majority of mankind permit them to evade the horns of this dilemma. The unreflecting multitude are not disturbed by the intellectual horn; the decay of religious belief unhappily relieves some acute reasoners from the pressure of the other. But is the *harmonious* development of religious faith and speculative reason impossible? Neither scepticism on the one hand, nor fanaticism on the other, can silence this question. Faith in God has, in all ages, been the stay of men. But the history of mankind also proves, that subtle speculation has more than once withdrawn the object of that faith from the reason, and therefore from the hearts of thoughtful men. In

modern times, Spinoza* has directed a remorseless logic to the problem of the universe. The mind of Europe, especially of Germany, has been influenced by similar trains of reasoning within the last half century, in a manner which ought to satisfy the guides of theological belief, that the dilemma now referred to may be a serious obstruction either to the religious or to the intellectual life of some. The condition of mind occasioned by the discussion of Theism, after this fashion, has so much affected even our own insular habits of thought, that some form of the dilemma is, at the present day, the chief force which draws grave and earnest persons among us into the metaphysical arena. They want to have the contradictions which reasoning has accumulated on their course of religious faith removed,—and that not by the dishonest process of shutting their eyes to them, but by the manly and candid one of thinking more deeply.

A motive of this sort has at least given birth to the work now before us. It is the latest, and a significant addition to our Scottish speculative literature. The author has betaken himself to that highest part of the metaphysical field which our earlier Scottish philosophers had not overtaken, and into which our living ones have now advanced. This small volume represents the fact, that Scottish metaphysicians of this generation are investigating a more comprehensive question than that which busied their predecessors, in the last and early part of the present century. Here a word of explanation may be appropriate.

METAPHYSIC is the study of Reason† in its ultimate relations

* See the *Ethics* of Spinoza. Part I. The force of Spinoza's reasoning depends upon the assumption implied in his definition of the word "Substance," (*i. e.*, *id quod in se est et per se concipitur; hoc est id, cujus conceptus non indiget conceptu alterius rei, a quo formari debeat*.) joined to his definition of the word "God." Hence, "*una substantia non potest prodire ab alia substantia*," (Prop. VI.) *Omnia substantia est necessario infinita*, (Prop. VIII.) and *PRÆTER DEUM NULLA DARI NEQUE CONCIPI POTEST SUBSTANTIA*, (Prop. XIV.) The *First Part* of the *Ethics* should be studied by philosophical theologians, as an illustration of the consequences of assuming that the logical faculty of man is coextensive with Being, and able to solve the problem of unconditioned existence. We can here only name the *Réfutation de Spinoza par Leibnitz*, just published for the first time from the Hanoverian MSS, by an accomplished French scholar, M. Foucher de Careil, (Paris, 1854.)—the most interesting recent addition to our continental literature of philosophy. The real significance of the theology of Spinoza is the great metaphysical question of this age. For an account of this singular recluse, see his *Life* by John Colerus, minister of the Lutheran Church at the Hague.

† Reason, *i. e.*, the power by which we distinguish objective reality from illusion—must not be confused with Reasoning, which is the chief modification of Reason in its logical and scientific function. In "perception" and "self-consciousness" Reason recognises Matter and our own Personality as real. Whether the Infinite and Divine Being be an object of Reason, is the debated question referred to in this article. In this highest aspect Reason may be termed Faith, or the Reason *par excellence*.

to Being. (Metaphysics and Logic are the two cognate departments of intellectual philosophy, or the theory of human knowledge. The metaphysician views knowledge in relation to *transcending existence*, and thus as a collection of beliefs; the logician as *pure thought*, and therefore without respect to real objects.—The less abstract part of metaphysic is an investigation of the origin, limits, and certainty of our knowledge of the *material* world. The higher metaphysic contemplates the foundation and nature of *theological* knowledge, the relation of creation and human personality to the Being and Government of God, and the problem of existence viewed as an all-comprehensive unity.) The Scottish votaries of this study were at first attracted to the material world, and the relation of reason to *finite* beings. Is *matter*, they inquired, an object of human knowledge and thought? We all know the Scottish perseverance and sagacity which Reid and his associates devoted to this question. The problem regarding the *infinite* Being, Reid declined, even in the form in which it was proposed by Dr. Samuel Clarke.* The “decay of Natural Theology in England,” with which Leibnitz reproaches Clarke in the opening sentence of their famous Correspondence, might with more justice be addressed to Scotland,† whose men of thought have not until now devoted themselves to a part of metaphysics that brought honour to England in the golden age of its purely speculative literature—the half century which followed the publication of Locke’s *Essay* (1690-1740)—which witnessed the controversies of Locke with Stillingfleet—of Clarke with Butler, and of Clarke with Leibnitz—and their reverberations in the writings of Collins and Law, Joseph Clarke and Jackson.

* See Reid’s *Essays on the Intellectual Powers*, iii. 3.

† We cannot find a text book of Metaphysics in the whole range of Scottish literature. Reid’s speculations on *matter*,—scattered throughout his philosophical works, include nearly all that our country produced in the early period of Scottish metaphysics. Natural or Rational Theology, as the higher branch of Metaphysics, is almost unknown in Scotland—a very different study having usurped the name. Not to speak of Hutcheson, another predecessor of Reid,—Andrew Baxter, in his *Enquiry into the nature of the Human Soul*, has pushed these researches, in some respects, into higher departments than either Reid or his successors. The *Enquiry* contains some interesting speculations on Time and Space, and bears marks of the influence of Clarke, and the school of English metaphysics which followed the publication of Locke’s *Essay*.—Hume has discussed Time and Space, and especially Causation, in his earlier work, and also in his *Essays*; while his speculations on Natural Theology suggest some of the profoundest questions that have ever been raised in the higher Metaphysics.

In defect of a work of native origin, we may name the excellent translation of the *Meditations*, and *selections from the Principles of Philosophy* of Des Cartes, (Edinburgh, Sutherland and Knox, 1852,) as perhaps the most convenient manual of introduction to Metaphysics to which the student can be referred.

In these circumstances, we welcome the appearance of this able essay, on a theme so interesting to every elevated mind. We augur good results from the application of Scottish genius to a class of questions which have been too much abandoned to the bigoted adherents of a sect of foreign metaphysicians. Mr. Calderwood expatiates over this high region, whose character and main outlines are well indicated in the headings of his chapters. As a symptom of the fact, that thoughtful persons at the present day are engaged in the same quarter, his volume might be styled a "representative" book. It is the reverse of representative, however, in the sense of servile discipleship. It is the most independent metaphysical essay we have read for a long time, and this freedom is united to an acuteness which justifies high expectations from the future efforts of a writer, who, in this his first work, has done so well. The work is not, indeed, conspicuous for literary art, nor as a record of very extensive philosophical reading; but it possesses perspicuity, which is the essential attribute of a philosophical style, and moreover unites clearness with condensation,—a quality not to be overlooked in a department of literature in which the bulk of a book is too often in the inverse ratio of its intellectual weight. The volume reveals a Scottish student of metaphysics, manfully addressing himself, in the experimental fashion, to the most exalted problem which can engage the human mind.

The *Philosophy of the Infinite* is associated with the chief metaphysical controversy of our time. We shall first of all endeavour to explain the opposite conclusions in this controversy, with some of the reasonings by which they are respectively maintained.

The highest question in the theory of human knowledge has, within the present generation, been discussed by the two chief living representatives of philosophy in Scotland and France:—Is the problem of Being, as an all-comprehensive unity, capable of scientific solution or not? can the nature of God, and the relation of creation to the Divine Being, be explained?—M. Cousin professes to solve this difficulty. He studies thought and knowledge experimentally. He thinks he has discovered two ideas, which, as relative and correlative, imply each other. There are *finite* thoughts, illustrated in all the phenomena of the mental and material world; and each of these necessarily suggests an *Infinite* Being,—for correlatives imply each the other. Try the mental experiment, he would say, and you will find that you ~~can~~ not exclude either *finite objects* or the *Infinite* from your knowledge. They are the very elements of Reason; and, as they cannot be expelled, they belong not to your

reason nor to mine, but to the universal reason—to the very nature of things. In knowing them we virtually participate in the Divine Reason; and discern the elements of Being, as all intelligence, created and Divine, *must* discern them. This correlation of Finite and Infinite is necessary to all intelligence, as such. It follows that the relation of God to creation—of the Infinite to the finite—is essentially comprehensible. Not merely is creation possible, but it is necessary; inasmuch as finite beings, and the Infinite Being, are inseparable elements of all knowledge and all existence. This solution of our problem is proposed by the French metaphysician, as a compromise between the Transcendentalism of Germany,—which rejects experiment as an organ for removing the mysteries of knowledge, and what we may call the Descendentalism of his French predecessors,—who rejected as illusory all knowledge that cannot be explained by means of the finite objects of sense.*

Sir William Hamilton, on the contrary, regards the problem as insoluble, and holds that M. Cousin's two elements of knowledge are both, as plural, only finite—an indefinitely great finite Being on the one hand, and an indefinite number of small finite beings on the other. Reasoning like the following is directed by our Scottish philosopher against the position which M. Cousin professes to have secured.—Every act of knowing, of which man is the subject, is an act in which the object known must be distinguished from him who knows, and as such it is limited by him. Thus the Infinite, so far as we are concerned, *becomes finite in the act becoming known*. It is only in a negative sense that M. Cousin's assertion of an infinite object, as well as finite objects in knowledge, can hold good. Finite implies infinite, merely in the same way as the presence of any object suggests its absence—for the science of contradictories is one. Is it said that the Infinite, alleged to be an object of our thoughts, is more than a mere negation of this sort? Put the assertion to the test of a mental experiment. Your alleged Infinite must, by the logical law of contradiction, be either *a whole* or *not a whole*. Try to realize either of these, *i.e.*, either an object so large that it can be no larger, or an object that is infinite. These are the only possible ways of logically reaching what is not finite. But in *both* of them we find a bar to our progress, when we make the attempt. Both are alike to us inconceivable. We can only oscillate between them. Call the one Absolute

* Mr. Wright's translation of Cousin's Lectures on *The True, the Beautiful, and the Good*, (Edinburgh: T. & T. Clark, 1854,) may be mentioned as the best English introduction to the speculations of a philosopher and educational leader of whom France has so much reason to be proud.—The theory of M. Cousin should be compared with the theory of Des Cartes.

and the other Infinite, and we have given names to the two, and only two, possible ways in which we may weary ourselves in trying to realize an object that is *not* finite. On the whole, aught beyond the finite is "incognisable and inconceivable." God, as not finite, cannot be known. "The last and highest consecration of all true religion must be, an altar *To the unknown and unknowable God.*"

So far the controversy which has introduced this problem to our Scottish metaphysicians and theologians. Mr. Morell, a popular interpreter of so many philosophical systems, evades the discussion of it with a slight allusion to the rival systems of the French and Scottish philosophers. "We freely confess," he adds, "that we are not yet prepared to combat, step by step, the weighty arguments by which the Scottish metaphysician seeks to establish the negative character of this great fundamental conception; neither, on the other hand, are we prepared to admit his inference. We cannot divest our minds of the belief, that there is something *positive* in the glance which the human mind casts upon the world of eternity and infinity. Whether we rise to the contemplation of the Absolute through the medium of the true, the beautiful, or the good, we cannot imagine that our highest conceptions of these terminate in darkness—in a total negation of all knowledge. So far from this there seem to be flashes of light, ineffable it may be, but still real, which envelop the soul in a lustre all divine, when it catches glimpses of *infinite* truth, *infinite* beauty, and *infinite* excellence. The mind, instead of plunging into a total eclipse of all intellection, when it rises to this elevation, seems rather to be dazzled by a too great effulgence; yet still the light is real light, although, to any but the strongest vision, the effect may be to *blind* rather than to illumine."* Mr. Calderwood more manfully applies logic and not rhetoric to the controversy. According to Aristotle,† it is just to vote our thanks, not only "to those whose researches yield conclusions which accord with our own, but also to those who seem to reason less adequately,—for they contribute something, even if they only exercise our speculative habit." We believe that more than this is due to Mr. Calderwood, dissenting as we do from some of his criticisms and inferences, and even of his premises. With some important modifications, he adheres on the whole to the opinion of the French metaphysician; and endeavours to meet in detail the arguments by which Sir W. Hamilton maintains, that only finite objects can be known. In his own opening words,—

* *History of Philosophy*, vol. ii p. 504.

† *Metaphysics*, b. ii. 1.

"The work now presented to the public is intended as an illustration and defence of the proposition—that man has a positive conception of the Infinite. It is an attempt, by a careful analysis of consciousness, to prove that man does possess a notion of an Infinite Being; and, since such is the case, to ascertain the peculiar nature of the conception, and the particular relations by which it is found to arise."

The author's view of the result of his investigation is thus condensed on one of the closing pages of the Essay:—

- "1. Man does realize a positive notion of the Infinite.
- "2. This notion of the Infinite is not realized by any course of addition or progression (either in space or time) which, starting from the finite, seeks to reach the infinite, and it is not the result of any logical demonstration.
- "3. This notion of the Infinite is in fact an *ultimate datum* of consciousness, involved in the constitution of the mind, and arising in various relations.
- "4. This notion of the Infinite, though real and positive, is only partial and indefinite, capable of enlargement, but not of perfection."—P. 226.

To the second and third of these propositions we yield a qualified assent. Some of our objections to the first and last we shall indicate in the sequel. The pages which separate the two quotations we have made carry us towards objects which have always interested contemplative minds. We avail ourselves of the opportunity they afford for considering some of the relations of the great problem thus suggested. But we shall follow our own course, and our somewhat desultory reflections may pass for what they are worth, with those metaphysicians and divines who "go sounding on their dim and perilous way" among these high objects.

This question concerning the Infinite Being, though a novelty in Scotland, is no novelty in the history of human opinion. It has been debated for ages;—and when we compare the latest with earlier forms of the debate, we learn that mental toil has not been thus continuously expended wholly in vain. Every metaphysical work, out of Scotland, of any moment, contains much regarding God, and the highest relations of finite beings. The world's greatest philosophers represent theological contemplation as the highest exercise of reflection. As involved in this, the nature and limits of religious speculation have been disputed from age to age, while unsound judgment in regard to these limits is and has been the parent of numberless disputes besides. The possibility of a knowledge of God, and the nature of such knowledge, have been debated by heathen

philosophers and Christian fathers, by scholastic divines and modern continental metaphysicians. Those who seek for evidence of this may find it dispersed throughout the extant literature of ancient, mediæval and modern times; or they may turn to Cudworth, whose "Intellectual System" has been, like Bayle's Dictionary, the half-way house in which so many of the learned have found their learning.*

But the question whether the Divine Being can be known by man is not new even among British debates. Not to refer to other instances, a hundred and twenty years ago it engaged two bishops† of the Irish Church. In the most elaborate part of the *Minute Philosopher* of Berkeley, the sceptical Lysicles professes to accept "an unknown subject of absolutely unknown attributes," as on the whole nearly as good as no God at all, while Crito and Euphranor contest the doctrine as an atheistic one:—

"You must know, then," says Lysicles, "that at bottom the being of a God is a point in itself of small consequence. The great point is, *what sense the word God is to be taken in.* I shall not be much disturbed though the name be retained, and the being of a God allowed in any sense but in that of a mind, which knows all things, and beholds human actions, like some judge or magistrate with infinite observation and intelligence. This I know was the opinion of our great Diagoras, who told me he would never have been at the pains to find out there was no God, if the received notion of God had been the same with that of some Fathers and Schoolmen. *Euph.* Pray, what was that? *Lys.* You must know Diagoras, a man of much reading and

* See the *Intellectual System*, (London, 1678,) *passim*, and especially, pp. 638-641, in which the Atheistic objection, "that there can be nothing infinite," is considered. Cudworth distinguishes the Absolute from the Infinite, and maintains, that "though we cannot fully comprehend the Deity, nor exhaust the *Infiniteness* of its perfection, we may yet have an idea of a Being *absolutely perfect*. . . . As we may approach near to a mountain, and touch it with our hands, though we cannot encompass it all round, and enclasp it within our hands."—This analogy of Cudworth fails, however, like every one drawn from finite objects. *A mountain is only finite.* There is thus no analogy between our imperfect grasp of an indefinitely great finite object, and our intellectual relation to the *Infinite Being*. Cudworth adds, that "whatsoever is in its own nature *absolutely inconceivable* is nothing; but not whatsoever is not *fully* comprehensible by our imperfect understanding."—Surely whatever is in no sense an object of our reason must be "nothing," as far as we are concerned; but it does not follow, that whatever cannot be an object of our logical conception or faculty of comparison, is also, and in like manner, "nothing."

† By the way, the nature of our knowledge of God, and the sufficiency of the *analogical* hypothesis to account for theological knowledge, have engaged not a little attention from the episcopal bench. Besides Berkeley and Brown, we have the names of two Archbishops of Dublin and three English prelates associated with these questions. We refer to Dr. King's Discourse on *The right Method of Interpreting Scripture, in what relates to the Nature of the Deity*, which has been edited, with notes, by Dr. Whately.—Copleston's *Enquiry into the Doctrines of Necessity and Predestination*, pp. 115-141, &c.—Hampton's *Bampton Lectures*, and the metaphysical writings of Bishop Law, especially his "Notes" on Archbishop King's Essay on the *Origin of Evil*.

inquiry, had discovered, that once upon a time, the most profound and speculative divines, finding it impossible to reconcile the attributes of God, taken in the common sense, or in any known sense, with human reason and the appearance of things, taught that the words knowledge, wisdom, goodness, and such like, when spoken of the Deity, must be understood in a quite different sense from what they signify in the vulgar acceptation, or from anything that we can form a notion of or conceive. Hence, whatever objections might be made against the attributes of God they easily solved, by denying those attributes belonged to God, in this or that, or any known particular sense or notion; which was the same thing as to deny they belonged to him at all. . . . But all men who think must needs see this is cutting knots and not untying them. For how are things reconciled in the divine attributes, when these attributes themselves are in every intelligible sense denied; and, consequently, the very notion of God taken away, and nothing left but the name, *without any meaning annexed to it*. In short, the belief that there is an unknown subject of attributes, absolutely unknown, is a very innocent doctrine, which the acute Diagoras well saw, and was, therefore, wonderfully delighted with this system."*

But the alleged heresy is defended with acuteness and learning in *The Divine Analogy*, a work which appeared almost contemporaneously with the *Minute Philosopher*. This ingenious treatise appeared in London in 1733. Its author, Peter Brown, Bishop of Cork and Ross, published a previous volume on the *Procedure, Extent, and Limits of the Human Understanding*. The *Divine Analogy* may be read in connexion with the subject of this article. It is an attempt to reconcile the possibility of theology with the principle that God is absolutely incognisable. The author refers to an array of passages in Heathen and Christian writers, which assert, in the strongest terms, the impossibility of any knowledge of the Divine Being.† He maintains, that it has been the catholic

* See *Berkeley's Works*, vol. ii pp. 56-65

† The hyperbolical language attributed to the Fathers hardly falls short of the monstrous paradox of Oken, which identifies God with Nothing. "We cannot," says Bishop Brown, "be said only to have *indistinct, confused, and imperfect* apprehensions of the true nature of God, and of his real attributes; but *none at all in any degree*. The true meaning of the word 'incomprehensible' is, that we have *no idea at all* of the real true nature of God. . . . The Fathers mean not that we cannot *fully* comprehend the true nature of God and his attributes, but that we are not capable of *any direct or immediate* apprehension of them. Agreeably to this, their common epithets for God are that he is *ἀγνώστου*, (*more than unknown*), *ἀνύπαρκτος*, (*without existence*), *ἀνοητος*, (*without substance*); and Dionysius asserts that the term *ουσια* (*substance*) cannot properly be applied to God, who is *ὑπερῳσιος*, (*above all substance*), *ἄνοητος*, (*without mind or soul*). And what is more remarkable, some of the ancients rejected even the word *perfection* as very improperly attributed to God; for this reason, that they apprehended that "He is beyond all bounds of perfection."—Pp. 63, &c. God, some Fathers were wont to say, is *nothing of the things which exist*, i.e., He cannot be included among the Beings of the universe.

opinion of theologians and philosophers, that we cannot know God and his attributes, even imperfectly, as they are in themselves; and that this catholic opinion is the sound one. The concluding chapter of the *Divine Analogy* is devoted to a criticism of the passages in the *Minute Philosopher*, from which the preceding extract has been taken.

It is interesting thus to connect the present with the past. But we are here concerned with the discussion in its present phase, and the volume by Mr. Calderwood presents many convenient positions for so contemplating it—one or two of which we shall now take the liberty to occupy.

The second and third chapters of the *Philosophy of the Infinite* are devoted to what some may perhaps regard as merely verbal criticism. It is indeed difficult so to connect these discussions about words, with the living current of human interest, that they shall not degenerate into pedantry, and degrade the thoughtful man into the sectarian metaphysician—that pillar-saint of literature. But an examination of these chapters may convince such persons that the study of words to which they might introduce the reader is for the most part of that higher kind, which requires at each step a mental experiment, and reflection on logical and metaphysical laws. In one of them a criticism of Sir W. Hamilton's favourite "contradictories"—the Absolute and the Infinite—conducts us through a course of meditative exercises upon infinity; and in the other, our intellectual relation to what is neither finite nor relative is analyzed, in reference to the applicability of the term "negative notion" to express the relation. The author refuses to recognise any other "Absolute" than an "Infinite-Absolute," and professes to agree "with philosophers generally" in the belief that there is only *one* existence that is *not* finite, relative, and dependent.

We do not think these chapters, however, the most satisfactory part of the book. Instead of recognising *two* unconditioned beings, the chief defect of Sir William Hamilton's theory is, that it hardly leaves room for the recognition of any. For what is the real tendency of his statements about an "infinite" and an "absolute?" Not that they are two contradictory *beings*, but rather two contradictory modes in one or other of which *thought* must transcend what is finite and relative,—if it can do so after a logical fashion, at all.—Is it affirmed that our intellect can take the measure of the all-comprehensive unity of Being—that this problem of the universe can be solved by man—nay, that it has been solved by M. Cousin? Then let us try the experiment of conceiving the nameless One, whose relations we profess to define. There are just two ways in which the rules of logic

permit us to do so—the way of adding for ever, and the way of rising beyond all possibility of addition—the way of conceiving an infinite *not-whole*, and the way of conceiving an absolute *whole*. In neither of these ways can the veil which hides Being be removed. Thought cannot infinitely expand itself, and yet it cannot cease expanding. But there can be no third road out of the darkness. The understanding is thus confined, on account of its intellectual structure, between these extremes.—Now this is a logical, rather than a metaphysical experiment—an experiment upon the possibilities of human thought, and not a statement regarding objective existence. Mr. Calderwood has reversed this aspect, and has moreover attributed a distinction as old as Aristotle to Sir William Hamilton.

(Mr. Calderwood strenuously maintains that the Infinite is also Absolute, adding, that it is “obvious that the Infinite is perfect and whole.” “If anything,” he says, “be perfect or complete, the Infinite must; for if it were imperfect or incomplete, it would be no longer infinite. If anything be total the Infinite must, for if there were any want in its totality it would cease to exist.”—(P. 29.) And yet he adopts Aristotle’s definition of the Infinite—*οὐ αἰεί τι ἔξω ἐστὶ*. (That of which there is *always* something beyond.) But in the very passage which contains the definition, Aristotle carefully distinguishes from the Infinite the Absolute or Perfect—*οὐ δὲ μηδὲν ἔξω, τοῦτ’ ἐστὶ τέλειον καὶ ὅλον*. (That of which there is *nothing* beyond.*) We are at a loss how to reconcile this discrepancy in Mr. Calderwood, (in so critical a part of the question in debate.

But is the darkness, then, impenetrable? Can we know *only* the finite objects of this transitory world? When we speak of the Infinite Being are we only “darkening counsel by words without knowledge?” In the cave of Plato, a world beyond is at least dimly and figuratively recognised. And all the great Platonic minds have aspired—but not through perception and logical intelligence—to the perfect and unchangeable, as the only reality, surrounded as we are by the passing shadows of sense. Cousin, however, boldly proclaims, that this higher world is discerned through the understanding, clearly enough to reveal the relations of this finite universe to the Infinite, and thus to

* See the whole discussion concerning the Infinite (*τὸ ἄπειρον*) in Aristotle’s *Physics*, (lib. iii. ch. 4-13.)—See also Locke’s *Essay*, (b. ii. ch. 17)—where he maintains that we have only a “negative” notion of infinity, and compares the same with the corresponding passages in the *Nouveaux Essais* of Leibnitz and Cousin’s *Lectures* on Locke. Curious readers may trace the hypothesis of *negative* notions of the human mind, and also the distinction between the *infinite* and the *absolute* or *perfect*, through a long period in the history of philosophy.

give a foundation for reasonings about their mutual relations -- But this, argues Sir W. Hamilton, is no Infinite nor Absolute either, which can thus take its place in our thought on a level with ourselves and the finite objects around us. The very act of thinking about a so-called *not-finite* has rendered it definable, if not definite, as far as our knowledge is concerned. There *may*, indeed, be "something beyond,"—inconceivable, and "negatively" known. But when the understanding tries to expand for its reception, thought becomes illogical, and thus destroys itself in the very act. It is the negation of thought, and not any positive object, that is reached when we try to transcend the world of defined objects, and, as it were, to *realize unlimitedness in the concrete*.

These are the extremes of opinion concerning this highest problem of human speculation. The one theory seems to represent it as *capable of being solved*; the other, not merely as insoluble, but as really *no problem at all*.—Is not the true opinion a mean between these extremes? Does it not recognise our knowledge of the *facts*,—finite beings and the Transcendent Being—which occasion the difficulty on the one hand; and on the other the impossibility of any solution of their relation by human understanding? This would account for contradiction emerging, whenever a solution is irrationally attempted, and teach the need for withdrawing our faculty of comparison and reasoning from a region for which it is unfitted. Are we wrong when we suppose that M. Cousin, who speaks of the "incomprehensibility" of God, and grants that we are unable "absolutely to comprehend God," wishes his theory to be interpreted in harmony with the principle that the Great Problem is fundamentally insoluble; and that when Sir W. Hamilton indulges his matchless logical ingenuity in eliciting the contradictions which follow an illegitimate application of reasoning to the Infinite and Eternal, his demonstration does not touch the pillars on which the Facts themselves rest—mysteriously irreconcilable and yet known to be real?

On this intermediate hypothesis, while we have what may be called a *metaphysical* knowledge of material and finite beings,—which may be converted into science by reasoning and induction; we have a metaphysical knowledge of the Transcendent Being,—as *not* an object of logical definition and scientific reasoning at all. We believe, and therefore know, that the Infinite One exists; but whenever He is logically recognised as a term in thought or argument, either the object, like the argument, becomes finite, or else runs into innumerable contradictions. We hold, with Cousin, that the Transcendent Being is not *wholly* unknown. How else can we account for

this controversy at all? And we hold with Sir W. Hamilton, that, as transcendent or unconditioned, Being cannot be *scientifically* known. But the Scotch philosopher seems to cut away every bridge by which man can have access to God; and the French philosopher seems to plant the Infinite, as an *indefinitely known finite*, in every region of human knowledge.

But it is time to pass to the evidence by which alone any hypothesis on this subject can be converted into a solid theory. The last few paragraphs can hardly be saved from the charge of scholastic pedantry, unless we connect their words and formulas with wholesome facts. This investigation, like every other philosophical one, must be ultimately based on mental facts.* We must endeavour to carry into these dark and intricate regions the torch of experiment, which has illuminated so many subordinate parts of knowledge, but which most speculators about the Infinite have cast aside.

We cannot propose a method for investigating the character of theological knowledge more appropriate than the examination of TIME, SPACE, and CAUSATION, which is suggested by the three leading chapters in Mr. Calderwood's Essay. Eternity—Immensity—Omnipotence—these terms, when we try to utter them intelligently, seem to carry thought beyond its sphere. When, in an hour of unusual contemplative effort, we seek to realize their meaning, Reason is foiled by an obstacle quite unlike those which are met and removed by victorious Science. The obstacle is not like that against which the brave mathematician struggled, before he witnessed the solution of his problem rising out of familiar axioms and principles; nor like the outstanding phenomena in the material world, which have so often surrendered to induction. On the continents of finite being, the boundary line of the unknown is gradually receding, as the increasing army of investigators discovers fresh analogies, or detects in new phenomena illustrations of old theories. But we all know Augustine's deliverance about Time; and we have read of the sage Simonides, who, when asked by Hiero about God, (*quid, aut quale sit Deus?*) demanded a day to prepare his answer—and then another and yet another day—the obstacle to a reply gathering strength the longer the question was struggled with. The ages of past human history have removed the veil which concealed

* Some minds, confined by the habit of observing only what is external and material, seem unable to apprehend the meaning of the term "fact," when applied to an object which cannot be seen and handled. If their intrepidity in speculation be equal to their rashness in assertion, they must reject Christianity—which deals essentially with spiritual facts—as well as Metaphysics.

from science many a region on the intellectual globe, and future ages will continue to spread the light of this species of knowledge. But the achievement of realizing Eternity, Immensity, and Deity in human thought, must remain to the end as remote from accomplishment as it was when they kindled the imagination and reason of man at the outset of our race. These are eminently the words which suggest that insoluble problem in which all the difficulties of theological and philosophical knowledge are wrapped up,—the due appreciation of which might conciliate many controversies, and give relief to pious minds troubled by the seeming variance of Faith and Reason.

Time* is, at least, a formal and typical illustration of the mysterious problem whose elements underlie every part of human knowledge. It is at once *unlimited* and *revealed in parts*. Interminable duration is out of logical relation with terminable duration—Eternity with a series of moments—an Eternal Being with the succession of time. We cannot limit Time, and yet we cannot reconcile Eternity with the succession of finite periods. The infinite and finite here seem to exclude one another, and yet both must be recognised. Eternity involves contradictions, when it is virtually limited by being made an object of human thought. Thus to limit the illimitable is to convert it into a bundle of contradictions, illustrated in every attempt, from Aristotle to the antinomies of Kant, to apply reasoning in a region from which the faculty of comparison should be withdrawn. Mr. Calderwood expatiates on the "irrestrictive" character of Time, but denies that it can be even relatively limited. He thus obscures that aspect of this intellectual mystery which, in our view, constitutes its chief value. We must here pause a little, and extract two passages, in one of which Time is contemplated in its transcendent, and in the other in its finite manifestation.

"Time is a condition of thought, inasmuch as no object can be realized in thought without it; but it is not a condition in the sense of limiting the object of thought, or even in any way influencing that object, otherwise than in affording it mental or subjective existence. On the other hand, though time is realized only as a concomitant of the object of thought, the object does not in any sense limit or restrict Time. On the one hand, Time does not limit the object, and

* We need hardly remind the reader of an ambiguity in the word *Time*, which is sometimes applied exclusively to a *limited succession of events*, e.g., human life in this world, the present mundane system, &c. It is thus distinguished from Eternity, (as some, without warrant, assume it to be) *unchangeable existence*. We use "Time" as the verbal representative at once of the finite and the transcendent meaning.

on the other, the object does not limit time. . . . The characteristic of our conception of time which has now been indicated, and which reveals that we cannot, by any accumulation of objects, reach the limits of time, marks a very decided contrast between this condition of thought and many others to which we are subjected. The point of contrast is that this condition does not exclude any object from the mind, while other conditions have an exclusive characteristic. This condition presents no barrier to the recognition of any object whatever, while many other conditions admit to the mind only such objects as possess certain qualities, which qualities imply conformity with the nature of the conditions. Time is not restrictive or exclusive; most other conditions are exclusive. We therefore denominate time an *IRRESTRICTIVE* condition of thought. . . . We must think time; we cannot think it as finite; therefore we must think it as infinite. On the evidence thus presented, we maintain that in our conception of time we have a conception of the Infinite."—Pp. 87-91.

It is true that some necessary conditions of thought are not irrestrictive. This very phenomenon of Time itself seems to suggest that even the *logical* laws and relations, while true and necessary within their own sphere, do not possess this character—for unlimited time is an object to which they cannot be applied. We know that Time is unlimited, but we cannot logically conceive its *unlimitedness*. When we seem to do so, we virtually limit it in thought. If we truly can form this conception, what is its character?—As infinite, it cannot be a *whole*: there must be "always something beyond." But in conception and reasoning we can deal only with *wholes* and their correlative *parts*. The statement that we have an "indefinite" conception of infinite time, hardly suggests this peculiarity. The knowledge is not merely *indefinite* but *absolutely indefinable*, and therefore beyond the sphere of thought, viewed as a faculty of comparison. It is that part of our knowledge which cannot be compared by the logical faculty.—But is not Time also revealed in parts and portions? This Mr. Calderwood denies. To us the true answer seems to illustrate in a new aspect the logically inconceivable character of Time.

"It has been strongly maintained that we can think time *relatively* limited, though we cannot think it *absolutely* limited. For example, it is said we can think a series of events occurring in time; we can select the first and last of these; and then we can think the portion of time beginning with the first event and terminating with the last, and thus obtain a notion of time as relatively limited. Now, if we carefully examine our consciousness in such a case as this, it will be obvious that even here we have no conception of *limited* time. . . . We realize the objects in time, but we do not realize them as limiting time. . . . When we observe two vessels at sea we recognise the

ocean between the ships, but it is equally true that we perceive the ocean beyond them."—Pp. 91, 92.

Neither unlimited nor limited Time, viewed in the abstract, can be conceived as a whole. Yet the parts in a series of successive events are in mysterious relation to eternity. They seem to be *parts* of that which is *not a whole*, while the understanding can only compare (finite) wholes with parts. The very analogy of the ships on the ocean so far indicates this. We perceive the ocean beyond them; but *a part of it* is between them. The analogy, however, is a misleading one;—as every analogy must be, between the relation of finite to the infinite on the one hand, and any two finite correlatives which the mundane universe presents on the other. *The ocean is finite as well as its parts.* The analogy requires not a finite but an infinite ocean. This illustrates by the way—apart from the objection that might be founded on the peculiar nature of the causal relation, the vice of a common illustration, which represents the changes in the universe as waves on the ocean of Infinite Being. We inevitably slide into the notion of a finite ocean, in which the waves are parts, instead of an infinite ocean whose waves can bear to it no conceivable relation at all. So it is with every attempt to apply the understanding of man to the problem of Being; it either fails or issues in Pantheism. The logical organ of comparison is applicable only to finite objects; the relation of what is limited in time, space, or degree, with the Infinite, cannot be a logical correlation. While it does not contradict the logical laws it transcends their sphere.

In this contemplation of the relation of periods of time to Eternity, we thus come in sight of the one insoluble problem of human knowledge. As Berkeley says, "the mind of man being finite, when it treats (logically) of things which partake of infinity, it is not to be wondered at, if it run into absurdities and contradictions." But the study of Time prepares us for more than a vague expectation of this result. It proves not merely that the problem *may* be insoluble, but that it *must* be so, and that every endeavour to solve it, alike in these regions of space and time, and in the concrete world of real existence, is the parent of confusion and contradiction.*

* These insurmountable difficulties connected with Time are discussed but not solved by Plato in the *Timæus*. Eternity, he says, is one, but (limited) time proceeds in succession. The former is fixed, the latter a created and changing state. Eternity (*aión*) is that which always is (*ἐστὶν ἄν*). A similar theory is held, among others, by Cudworth, (*Intellectual System*, pp. 644, &c.) and by Bishop Law, in a modified form. The Platonic view of Eternity is propounded by Mr. Maurice in his volume of *Theological Essays*. As applied by him, it is a vain attempt to define the indefinable, or to transcend the human faculties. The very language implies a relapse into the notion of succession.

But is Time itself a *real being*, or is it only a *form or condition of knowing* real beings,—a form common, it may be, to all intelligence, human and divine, but existing *only as known*? Has Time an existence,—not dependent on any intelligence, created or even uncreated,—which must survive the annihilation of creation, and even of the Divine Creator? What is Time, when viewed, not as a law of human reason, nor as a modification of mental and material beings, but abstracted from all the minds and matter in the universe? A similar question has been raised in regard to Space. Perhaps we have not faculties for adequately enunciating, far less for answering, the question. Yet, our readers may like to know whether Mr. Calderwood ranks himself among the worshippers of an absolute Time and an absolute Space,—these “idols of modern Englishmen,” as Leibnitz calls them. We quote the passage which relates to the metaphysical character of Time, and refer our readers to a corresponding one concerning Space:—

“What is Time? Is it only in our thoughts, or has it also an objective and external existence? In answer to this we reply, that it seems of the nature of our conception of time to recognise it as something external. When we think of time we think of it as something which exists without us and apart from us. . . . So far from time being regarded as a mere product of the human mind, it seems plain that time would have existed even though the human race had never been brought into being. Since this is the case, it is manifest that to maintain that time is purely subjective is to contradict consciousness, and thus to overturn the basis of philosophy. . . . Our conception of time seems analogous to our conception of substance. . . . If time be an external existence, the question immediately arises, is it an attribute of the Deity, or is it an infinite existence separate from the Deity? The former (hypothesis) is, we think, in direct opposition to our conception of time. When we think of an event occurring in *time* we do not think of it as occurring in *God*, nor would we thus describe it. But if time be a separate yet infinite existence, how can there be two existences, both infinite, yet *each independent of the other*? This is a difficulty which we cannot profess to remove, and yet it is a difficulty which arises solely from our ignorance of the *nature of time*.”—Pp. 97-99.

We are not so sure that this circumstance entirely explains the difficulty. It is perhaps partly due to assumptions about abstract Time, which our mental experience, when it has been purified from prejudice by metaphysical analysis, does not verify. What is the history of past metaphysical *discovery* but a history of the gradual retreat of prejudices, in many respects analogous to the opinion that Time is an Infinite Being?—Perhaps the chief “discoveries” of which metaphysics admits are these conquests of

prejudice by reflection, through which the native and spontaneous judgments of reason recover the authority of which sense and ill regulated mental association had deprived them. Illustrations of this are innumerable in the history of philosophy. We are satisfied if we can point to such results, when we are assailed by the clamour of those who complain that the conquests of metaphysics (like those of Christianity itself) are chiefly in the mental and moral world—the amelioration of intellectual habits, and the expulsion of powerful prejudices. Victories like these are surely the parents and protectors of all useful discoveries, in the physical sciences, and in the arts which render this earth a more convenient habitation for man. But to return to our subject.

Any one who meditates about Time, can work out only an imperfect expression of his meaning, when he tries to go beyond that record of the facts of mental experience which is open even to those least accustomed to reflect. Leibnitz, with the continental metaphysicians in general, may be taken as the representative of the hypothesis, that Time and Space exist *only as modes of knowledge*. Clarke, and most of our British metaphysicians, regard them as in some sense *transcendent objects of knowledge*.* The varieties of modern opinion gravitate towards one or other of these extremes,—the one of which we may style the Formal, and the other the Ontological, extreme. It is difficult to discover language fit to express an *intermediate* hypothesis. But may we not avoid the monstrous supposition of two huge entities, without resolving Time into a mere manifestation of human thought or reason? If we could imagine the annihilation of all beings, created and uncreated, are not these words “time” and “space” still applicable to the nothingness which should ensue? Even in suggesting this view we are sliding into the ontological hypothesis. We have no words proper to express *absolute nothingness viewed as a receptacle of beings*. Yet while we cannot class Time among real entities—only with the negation of such entities—is it not the mysterious condition of *real existence* as well as of *our knowledge of it*; presenting as it were *potentially* that insoluble problem, which we find *actually* when we reflect upon Being and Causation?

(Is there divinity in Time and Space? They have seemed to some ingenious minds eminently suggestive of Deity; and well-known “demonstrations” of the existence of God have

* Neither of these views are developed in their “Correspondence,” which contains only the germs of them. Leibnitz calls Time an *order of successions*, and Space an *order of co-existences*. Clarke regards them as *attributes of the Infinite Being*. But we have here the seeds of the rival hypotheses. We have not room here to indicate the history of their development.

been rested on hypotheses regarding their nature. In them we have indeed ample receptacles, as it were,—ready to admit a Being who cannot be defined by the rules of the logical reasoner. We are prepared to ask, when we have completed our contemplative journey through this region of human intelligence, whether there be any Being—to take possession? And if there be an Infinite Being, is there also room for finite beings besides? But the *esse* is not either logically or metaphysically implied in the *posse*. Perhaps after all, any force which resides in the *a priori* part of Clarke's so-called *demonstration*, lies in its unconscious appeal to our sense of analogy. The fact that a Being transcending logical conception is thus *rationaly* possible, is felt to give some presumption of reality. The transcendent receptacle suggests the transcendent occupant. In space and time we have traces of an intellectual organ which is not satisfied with finite objects of reasoning. Must not One really exist, whose mysterious relation to finite beings suggests a problem, which *reason* may raise, but which *reasoning* cannot resolve? Are we wrong in the conjecture, that it is unconsciously through a channel of this kind, that these abstract conditions of knowledge and existence have carried some speculative minds up to the Divine object of knowledge, when they supposed themselves to be travelling thither on the level railroad of demonstration?)

What evidence, it may now be asked, does an experimental study of Time and Space contribute, towards an adjustment of the controversy concerning the Infinite and our theological knowledge? It may be answered, that they exhibit *in posse*, if not *in esse*, the data of an insoluble problem. They have revealed at least the possibility of relations in existence, which transcend the capacity of human reasoning. They illustrate how reason may have resources for raising questions, while it has not logical capacity even to apprehend the answer to them. But whether the possible problem be also, as real, an intellectually and morally urgent one, no exclusive study of the characteristics of abstract Time and Space can determine.

We therefore turn with Mr. Calderwood from these mysterious abstractions, to the concrete beings revealed in the worlds of sense and reflection—in a word, to the phenomena of Causation. We have found thought unable to realize Time and Space, either as absolutely limited or as unlimited. In causation, we find ourselves unable on the one hand, to believe that we, and the finite objects of the material world, are independent of aught beyond; and on the other, to realize logically, independent and infinite Being. Reason cannot be satisfied with a Finite-absolute universe. Every finite being—the greatest conceivable

complement of finite beings, as *dependent*, force intelligent belief beyond themselves, on something transcendent, which supports and accounts for them, and which they practically reveal. Try the experiment. The supposition of a *finite* Deity—however great his power may be—suggests, with the same intellectual force that the most insignificant event does, the existence of a still greater power to account for His existence. As long as any being is finite, and thus a possible object of logical conception and reasoning, it implies a cause, even as the greatest conceivable portion of time implies eternity. Thus Omnipotence no more excludes or absorbs finite powers, than Immensity excludes or absorbs portions of space, or Eternity periods of time. Just as an application of reasoning to the relation of finite periods to eternity—by virtually defining the infinite—gives birth to a host of contradictions, so the Pantheistic paradoxes issue out of a similar illegitimate application of reasoning to the Infinite Power. A power that transcends the limits of thought, cannot be reconciled in *conception* with a finite and created power. When we try to conceive them, the latter is by the very act absorbed into the former. But we may not deny the metaphysical, though we must the logical possibility of their co-existence in knowledge. There is room in the irrestrictive conditions of being, for what cannot be received by the restricted capacity of human thought. A Being that cannot be logically limited may exist, and beings within the logical limits—finite beings, may also exist. I may know the reality of both terms, but I cannot logically know their correlation. The attempt to realize it produces such paradoxes as a *past* and *future* eternity, and a Deity developed in creation and still susceptible of growth.

In the following vigorous passage, Mr. Calderwood, who appears as the disciple of M. Cousin, seems to overlook the *logical* difficulty implied in this dualism of unconditioned existence, and to exaggerate the weak part of Sir W. Hamilton's metaphysics. We quote the passage, as a *résumé* of the difficulties suggested by a statement of the logical insolubility of the problem of Being, which, like Sir W. Hamilton's, is unaccompanied by a theory of human belief, in finite beings and also in the Transcendent Being.

"We find and must find all our knowledge of the Infinite Being in relation. It is only as this Infinite Being exists in relation that he can be known; and it is only by recognising him in a particular relation, or in various relations, that we can obtain any knowledge of him. It is especially at this point of the discussion that we feel constrained to lift our decided protest against Sir W. Hamilton's definition of the 'unconditioned,' as that which does exist, and can exist

only as free from all relation. . . According to this definition, it must be maintained, that before the act of creation God was infinite; by the act of creation he ceased to be infinite, that is, he became finite. . . . Granting that, before the creation, God did exist as an infinite God, what was there in the act of creation, or what is there in the existence of created objects, which proves that God has ceased to be infinite, or which in any way prevents him existing as infinite? Before the creation God was unlimited, and what was there in the act of creation to limit God? . . . We say, therefore, that so far as the term unconditioned is defined as indicating what is unrestricted or unlimited, it is applicable to the infinite God; but so far as it is defined as indicating the absolute negation of all relation, it is not applicable to the infinite God. If, therefore, Sir William assert that the infinite is that which is unrestricted and unlimited, we admit it, but rejoin, that the infinite may, nevertheless, exist in relation. If, however, Sir William assert, as he does, that the infinite is that whose existence involves the absolute negation of all relation, we reply that no such infinite exists—we plead for the knowledge of no such infinite—and consequently Sir William's arguments to prove the impossibility of any knowledge of such an infinite are entirely apart from the question. Sir William Hamilton, in defining the infinite, and in arguing in reference to it, plainly deals with a mere *abstraction*, for which no one pleads, either in existence or in thought. It is the Infinite which he considers rather than the only infinite Being. He takes the term infinite, and characterizes it as unlimited, unrelated, unconditioned—which are only so many words heaped around the term infinite. What then is this infinite? It is nothing—it is a mere abstraction which has no existence, either externally, or in any man's thoughts. . . It is wholly with this abstraction that Sir William deals. . . Most assuredly the infinite, as described by Sir William, cannot be known: but, more than that, it does not exist—it is nothing. Yet God does exist, and though in direct violation of Sir William's definition, he exists as infinite and yet in relation; and in so far as relation is a necessary condition of knowledge, God in existence perfectly realizes that relation, and in this respect there is no obstacle to our knowledge of him. We have already had occasion to contend against this mistake of the abstract for the real, and in this we conceive lies the key to almost the whole of Sir William's arguments against a knowledge of the Infinite. In endeavouring to determine whether we have a knowledge of the infinite, we are not to take an abstract term and enter upon a course of abstract reasoning. We are not to assume a principle, and thence proceed to draw certain inferences, as if these must coincide with the facts of consciousness; the question is one of psychology; what we have to consider are mental data or facts of consciousness; and we have to inquire whether in these we find a knowledge of something more than the finite. It is not an abstract with which we deal,—it is not a knowledge of an abstraction for which we seek. God is not an abstraction. He is not a Being whose existence prevents all being besides."—Pp. 182-186.

The difficulty is logically insurmountable in Causation as in Time. We could find no logical formula for the relation between a *succession of periods* and *eternity*. Each seemed to exclude the other. Not less out of human reach is a formula which should express *creation* in its relation to *Deity*. Here, too, each seems to exclude the other. The truth is, if *unconditioned existence* (God + created being) may be regarded as virtually *two finite wholes*,—one of them no doubt indefinitely great, and as such called an infinite power,—then a Being transcending each is required to account for both of them.

This is the critical part of the discussion. We regret that we cannot, without modification, subscribe to the opinions of either the Scottish or French metaphysician, when these are rigidly interpreted. Here we fear we can hardly preserve clearness, in the narrow limits to which we are confined.

In a former article,* we offered some remarks on Sir W. Hamilton's Theory of Causation. The difficulties in the way of a reception of that theory, which then occurred to us, have not been removed by additional reflection. We shall not return to the subject at present. We coincide in many of Mr. Calderwood's criticisms, nine in number. But we must specially except the eighth, in which he charges Sir W. Hamilton's philosophy with Pantheism. That eminent metaphysician expressly confines the application of his hypothesis to *finite* causation; and the whole analogy of his philosophy excludes the possibility of a theory of creation. With this latter view we coincide. The application merely of the logical faculty of the human mind to solve the relation of finite and transcendent Being must, as we have already said, end in Pantheism or Atheism. Either finite beings are absorbed, as modifications of the Infinite Being; or else Deity is excluded as not consistent with the reality of finite agents. We are thus left oscillating between an *Infinite universe*† and a *Finite-absolute universe*‡. But here we complain of defect. The Scottish philosopher suggests no means for extricating us from this state. The French metaphysician virtually adopts the latter alternative, when he reasons of the Infinite Power, as an indefinitely great finite power. In what we incline to regard as the true doctrine, reason is recognised as, on the one hand, spontaneously rejecting the hypothesis of a *Finite-absolute universe*,† and on the other as incapable, in the exercise of its logical functions, of realizing the Divine Being, whose existence we are nevertheless forced to recognise. Every

* See *North British Review*, No. XXXVI.

† The universe of Pantheism.

‡ The universe of Atheism.

attempt to compare scientifically what we may call the Finite-relative objects, which constitute the worlds of mind and matter,* with the logically inconceivable Being, must occasion contradictions in the speculations which it sets agoing. We are bound to accept *both*, and the latter can be known only as practically revealed through the former.

But *why* thus bound? What mental force thus inclines the balance? In sense and reflection we have a direct revelation of an indefinite number of finite objects. Our knowledge of *finite* beings is ultimately secured,—not by the support of argument or inductive proof, but by a mysterious organ, which we may call Intuition, and which supplies to thought, *through experience*, the materials of physical science. But why does not this perceptive intuition satisfy us? Why may we not regard the finite objects thus revealed as absolute, independent, and self-contained?—In reply to questions like those, Mr. Calderwood offers what he calls “the common theory” of the causal judgment. On the whole, he maintains the existence of two—unaccountable—convictions:—(1.) That there is a cause for the existence of every object in its present form. (2.) That all things, except God, had an absolute commencement; that is, that there was a First Cause. In connexion with the second of these alleged ultimate convictions, we quote the following interesting and suggestive passage:—

“The upholder of Atheism will observe, that we do not profess to *prove* the existence of a First Cause. We do not profess to *demonstrate* the fact. We maintain that it is above proof—that it is beyond all demonstration. We maintain, that it can be neither doubted nor demonstrated, but is a truth necessary to the mind—a truth which must be believed. Not, indeed, a truth which is always present to the mind,—not a truth which cannot be shunned;† but a truth which must be realized if we seek to account to ourselves for the origin of all things; a principle which, when raised in the mind, cannot be doubted, and, in arising, stands supreme. We do not uphold the argument from design as a demonstration logically exact. On the contrary, we maintain, that we never can have a logical demonstration of the existence of God. The creation of the universe is only a finite manifestation of power, and from that we can never infer the Infinite. Every such argument is incompetent, as embracing more in the conclusion than is involved in the premises. . . . All the use we would make of what has been called the argument from design is as an illustration—as presenting a course of thought in which the conception of a First Cause will arise—as originating an inquiry which, if prosecuted, must terminate in belief. Let any man honestly carry out the inquiry in reference to the origin of all things, and he

* The universe of Theism.

will find that he can no longer doubt—that by the constitution of his mind he must believe in the existence of an infinite and eternal First Cause.”—Pp. 175, 176.

An induction of our belief in the Transcendent Being, founded on the finite and dependent objects of sense and consciousness, is no doubt absurd. Paley’s proof does not meet the want expressed by the religious scepticism of our time, which complains of weakness beneath the foundation on which his museum of the ideas and designs in creation is constructed. Induction yields an indefinitely great finite being, but not the Infinite Power. So far we agree with the opinion expressed in this paragraph. But we incline to a different and simpler statement of the convictions which carry us beyond the immediate objects of sense. The two “ultimate” convictions referred to in the preceding extract may, we think, be resolved into one. Here we must explain our meaning.

We have said that the finite universe of matter and mind is known in a twofold aspect. We attribute a *real*, and likewise a *dependent* existence to the beings contained in it. In Perception, the material world is recognised as real; in Induction, as dependent. *We cannot expel either of these convictions. At present, we concentrate our attention upon the second of them. Here our author, following the “common theory,” proclaims *two* mental forces which inevitably draw us beyond the dependent phenomena—the *causal* and *supernatural* convictions. Now the causal, as it seems to us, is only the supernatural judgment in another aspect. We cannot discover any evidence of a *necessity** in reason, for the belief in *finite* causation and the uniformity of the laws of nature. We are no doubt intellectually unable to regard a finite object or change as self-originated or self-subsisting. But it does not follow that objects and changes depend on other *finite* objects and changes. Creation itself is not necessary; *far less are we conscious of any irresistible conviction that the finite universe must contain more objects than we perceive it to contain.* Our knowledge that it *actually does so*, as well as what we know of the harmonious co-ordination of its parts and sequences, seems to be the growth of experience, regulated by the associative and logical laws. We thus gradually learn that we ourselves, and all the objects directly known through sense-perception, are implicated in a great and regular scheme, whose arrangements are uniform and significant. On

* “Necessity” is an ambiguous term. We have *metaphysical necessity*, i.e., in reason; *logical necessity*, i.e., in thought; and *physical necessity*, i.e., founded on the experienced uniformity of the laws of nature. We refer here only to the first.

the basis of this conviction, gradually formed in the human race and in its individual members, we learn to interpret these arrangements, and thus form the physical and social sciences.

But it is also true that every change—nay, every finite being, *must* be viewed as a dependent being; and “power” is the correlative of dependence. Try the experiment. We find that every object of logical thought demands an explanation; and also that a scientific explanation, when offered merely by inductive experience, leaves the demand unsatisfied. “The most perfect philosophy of the natural kind,” as Mr. Hume says, “only *staves off our ignorance a little longer*.” The ascertained law of gravitation sheds light on the mechanical changes of the universe, only to reveal the darkness which envelopes the cause of the gravitation-law itself. The really *necessary** causal judgment has, as it seems to us, another reference altogether than to laws of nature, and uniformities of succession among the finite changes of the universe. It is a general expression of the fundamental conviction of reason, that *every finite event and being depends† on, and practically reveals, the infinite or transcendent Power*. It is a vague utterance of dissatisfaction with an absolutely finite universe—*totus, teres, atque rotundus*—and of a positive belief, not only that finite objects exist, but that they do not *exhaust* existence, seeing that, they depend on God. Thus, as every portion of time seems to lose itself in Eternity, so every finite being and power suggests the Infinite Power in mysterious relation to it. The term *First Cause* may here, as inadequate, mislead us. Assume, as divine, a necessary cause, adequate only to the creation of the known mental and material worlds. As finite, this assumed deity becomes dependent, and the question of a

* See note on preceding page.

† But this “DEPENDENCE” we cannot define. The facts and laws of Science and Supernatural Revelation may both be said to display the character of God, but not the *rationale* of their own dependence on the infinite and adorable One. It is a materialistic assumption on which Pantheists fall back, when they suggest the analogy of a finite substance and its phenomena. Atheists and Manicheans do away with the dependence altogether, the former wholly, the others in part. Enlightened Christian Theism regards it as in an emphatic sense unique, and incapable of being made an object of scientific reasoning. A world of debate thus disappears as irrelevant. The hypothesis of “occasional causes” is dismissed along with the rival one of a “pre-established harmony;” and we have a demonstration of the impossibility of a *scientific* or *speculative* account of the relation of the Transcendent Being to finite and dependent beings, whether in Creation or Providence (natural and miraculous); or to moral agents,—onfallen, fallen, or restored. We may have definite practical rules, as it were, in regard to these questions,—and so much knowledge as the rules involve. We may have Facts, but not a Theory of them. If so, may we say, that much labour has been worse than wasted by divines in embarrassing simple statements of Scripture with the formal dress of theory—in offering *solutions* of problems which Revelation—natural and supernatural—only *states*, because the human understanding could not bear the solution?

prior and greater cause immediately rises in the mind. We are intellectually dissatisfied,—so long as the object of which we are in quest is *within the range of the logical laws*, and therefore recognised as a power *only indefinitely great*. The dissatisfaction projects reason beyond the realm of finite, and therefore scientifically cognizable existence. The mental necessity which thus conducts us to the Transcendent Being and Power—with or without the intervention of finite beings and second causes—is the root of the only truly *necessary* causal judgment we can discover. The judgment, which sometimes passes under that name, appears to be the gradual issue of our experience of the regular evolutions of the created universe, and especially of our consciousness of volition. It is the former and not the latter mental force that *irresistibly* carries us beyond the narrow sphere of direct experience aloft

the great world's altar-stairs
That slope through darkness up to God.

In this view, the causal judgment illustrates, but is not occasioned by the weakness of human thought. Finite objects and events must be regarded as *absolutely* dependent. Our knowledge must be credited *so far as it goes*; and even if we could solve the insoluble problem of unconditioned existence, we should not thereby extricate finite beings and events from the mysterious relation of dependence. Even then should we not recognise finite objects as dependent on *one another*—which we have already learned to do through experience; and on *God*—which we are now compelled to do by the necessity of reason?

Being, in its ultimate relation to reason, may be (imperfectly because logically) described as manifested in two extremes—the one finite and plural, with which the faculty of comparison may deal; the other infinite or transcendent, which cannot be included in our logical generalizations. Reason thus presents two corresponding faculties or organs for the apprehension of real beings:—INTUITION and EXPERIENCE, governed by the logical and associative laws; and FAITH, to whose object, as transcendent, the laws of scientific thought cannot be applied. The problem of Metaphysics, regarded as the science of knowledge in its relation to Being, may be put thus:—Given Experience and Faith, lodged in a mind governed by the laws of association and logic,—to account for actual human knowledge.

In short, the Atheist's universe, and the Pantheist's universe, are both metaphysically impossible. The former excludes transcendent, and the latter absorbs finite existence. The dualism implied in creation and providence is logically inconceivable, because beyond the range of human thought; but it is originated

and maintained in belief by an unaccountable necessity of reason. Now we may believe what we cannot scientifically rationalize. Thus the balance falls on the side of the former of the alternatives to which we are confined by logic; and we escape from the mental oscillation, to which we were hopelessly abandoned, by a theory which declines to recognise in knowledge whatever cannot be logically conceived and reasoned about.

The application of these remarks to the nature and limits of theological knowledge is interesting. Theology is the science of God. If the lessons suggested by this article are sound ones, Reason does not reach the Divine Being by any pathway of argument; and when reached, the forms of argument cannot be applied to the solution of the problems suggested by His existence. The *foundation* and *structure* of theology are thus beyond the range of science. Reason, and not reasoning, conducts us to the elements of a question, to which reasoning cannot provide nor even entertain a scientific answer.*

The foundation of theology is a mysterious act of faith, which may be practically developed, but which cannot be reached, by reasoning. We have already referred to professed demonstrations of Infinite Being founded on these possibilities of existence—time and space. And we have indicated our judgment with regard to the inductive or physical proof† of the existence of God. We can no more infer the infinite or transcending Being, from the exhibition of an indefinitely great universe, than we can rise to Eternity by an indefinite addition of times, or to Immensity by an accumulation of finite spaces. Inductive generalization cannot draw from finite data more than they contain. We cannot thus account for an intellectual necessity which—unable to accept as self-existing what is only finite, carries belief beyond the sphere of generalization. Reason originally recognises real existence—whether finite or Transcendent—through a shorter and readier process than deductive or inductive reasoning. We call this process *perception* or *intuition* when it deals with the worlds of sense and self-consciousness; and we call it *faith* when, through the causal judgment, Reason attaches itself to the transcendent Being. The function of *reasoning* is in a manner intermediate between Intuition and Faith. Inductive reasoning creates the physical sciences, and thus virtually

* Theology here differs from the Physical Sciences. In the latter the *foundation* is mysterious. The existence and ultimate qualities of the material world, for example, are not known by means of reasoning but through perceptive intuition. But when thus known, systems of physical science may be reared, with the help of inductive and deductive reasoning.

† Sometimes called by divines *a posteriori*.

enlarges the sphere of our perception;* in so doing it discloses the riches of the universe, and thus practically reveals the character of the Being on whom all depends. Intuition provides the materials, and Faith the stimulus, to inductive research. Faith is not the ground of our scientific belief in the actual harmony of nature; this is learned from our experience of the uniformity and significance of the laws of the universe. Yet, by recognising the dependence of nature on God, Faith indirectly occasions the rational activity which, in a course of well regulated experience, arranges the discoveries of science. Thus experience,—supported on the one side by our lower, and on the other by our higher rational instinct, extends knowledge and builds up the sciences.

But, secondly, if *reason* thus provides the elements of the deepest problem of human knowledge, in the dependence of the finite universe (which may be scientifically known) on God, therein practically but not scientifically revealed, why, it may be asked, can *reasoning* not work out a speculative solution of this problem, which is thus proposed to it? We hear, for instance, of a science of astronomy, and a science of history. Both profess to interpret parts of the great revelation of Divine Providence contained in the worlds of matter and human society; and yet both are admitted to aim lawfully at *scientific* results. If the limits of human thought do not hinder the success of attempts to explain the phenomena of the starry heavens, and the race of man, how are they less consistent with endeavours to explain the mysteries of creation, and providence, and grace? A little reflection discovers that the essential analogy is wanting. To discover the harmony of dependent events, physical or human, is not to define the basis on which they ultimately depend. The experimental sciences are confined by their profession within the narrower of these regions. Every step in scientific theology,—and not the first step merely, must be taken in that region which escapes beyond the limits of our intellectual comprehension. If the inductive sciences, contrary to the remonstrances of Lord Bacon, are to be blended with speculative theology, their scientific character must disappear. We have more than one well compacted system of a section of the laws by which the created universe is regulated; and if we are satisfied to call this system a science, we have many sciences far advanced towards perfection. But if we are to regard each of these sciences, as a *segment of speculative theology, and a separate phase of its insoluble problem*, then the intellectual hindrance, which bars even the entertainment of any

* See Bacon's *Novum Organum*, lib. ii.; Comte's *Philosophie Positive*; and Mill's *Logic*, especially b. iii.

proposed solution of this last, must restrain the progress of human research in every department. It is quite true that all things in the worlds of mind and matter may be analyzed into mystery. Mysteries lie at the foundation of all our physical and social sciences. But they do not constitute the matter or substance with which the science, as such, deals. In fact, the sciences become mysterious, only when their respective sets of phenomena are contemplated in their relation to God, *i.e.*, when they are made to touch the insoluble problem of which metaphysics demonstrates the existence in the heart of theology.

These views invest sound theological studies and contemplations with an intellectual dignity, which was recognised in former ages by the highest spirits of the human race; and we cannot but deplore that this sublime region is so often disturbed by the disputes of perverted metaphysics, and the ignorant intolerance of sectarian zeal. We fear that devotion to theology cannot be affirmed of this age and country, when we witness the bigoted aversion of our men of letters to its very name, and also the meagre current literature which that illustrious name now represents. It cannot be that the study of the Being who is revealed in all the changes of the physical and moral worlds, and in the mysterious event for which previous history was the preparation, as later history is its consummation—after whom Plato, in his highest musings, sought not wholly in vain—whose miraculous manifestations have occupied the most powerful intellects and the largest characters of the race—in whose temple of contemplation may be found Augustine and Anselm, Melancthon and Calvin, Pascal and Leibnitz—the study which our own Bacon styles “the sabbath and port of all man’s labours and peregrinations,”—it cannot be that this august study is abandoned in the literature of our age, on account of any real want of fitness to the highest aspirations of the reason and the heart of man. Perhaps the course of thought suggested by this article may afford some explanation of the ominous fact, that so few of our highest minds are devoted to theological contemplations, and that the very term, with all its cognate literature, is set aside, by common consent, as expressing what is too sectarian and professional to be permitted to mingle with the great tide of human affairs.

Theological study is, as Bacon represents it, the culminating act of human reason. God can be definitely known by us only in the finite and dependent phenomena which form His *works* and His *word*; and it may be demonstrated that these phenomena cannot provide any means for answering the questions which speculation originates. All definite and systematic theological knowledge is the fruit of induction; but at the same time of an induction which must differ essentially, in the character of its

results, from that which is the organ of the physical and social sciences. It can yield only a series of *practical* solutions of an *absolutely insoluble* problem. When we try to go beyond the natural and supernatural phenomena, which constitute this practical Revelation of God, in order to construct a science of the transcendent and adorable One, we are punished by the confusion in which the revealed facts themselves become involved,—and we can escape this punishment only by restraining our logical and scientific forces within their appropriate territory. Reasoning itself demonstrates, that contradiction of thought *must* follow any attempt to find the *rationale* of the “revelation” of God, presented in Providence and Holy Scripture. The only “theology” that is possible is thus the fruit of an inductive study of a series of events and documents, all of which reveal God,—as far as man can receive the revelation, and also the weakness and narrowness of human understanding, which cannot entertain, far less work out, a scientific theory of what the phenomena thus practically manifest.

Revealed theology—whether the revelation be contained in the evolutions of nature or in the words of a book—is thus a body of practical knowledge,* rather than a science of speculative truths concerning the absolute relations of man to God. The one is demanded by the cravings of the human heart; the other is not in analogy with the human faculties. The Bible is not a speculative solution of the insoluble problem: philosophy can demonstrate that a solution of that sort is impossible. It is a mass of practical information, which guides our religious life in the necessary absence of any solution; and which we must receive in the conviction that it *demonstrably involves insuperable logical difficulties*. There is thus a chasm between the *metaphysical faith* which conducts us to the transcendent Being, and the *religious knowledge* in which alone that Being can be definitely manifested. The Revelation is not an opening for the advance of reasoning into the unapproachable region, to the margin of which reason had spontaneously travelled, and in so doing exhausted the logical capacity of man. It is rather a practical substitute, offered to us in our speculative impotence, and which cannot itself be made an arena for speculation. The Bible is not a supernatural development of the higher metaphysics; and it loses its significance and moral cohesion, when its contents are dealt with by theo-

* This is quite consistent with the possibility of a systematic arrangement of what is thus practically revealed, and of deductions from the revelations. To what extent the revelation of God may, by human industry, be thus presented, is a question which does not concern us here, and which at any rate we do not presume to touch.

gical and metaphysical warriors as if it were. It is only with modifications that we can accept the well known illustration of Locke, when he says that the man who takes away reason to make way for revelation "puts out the light of both, and does much the same, as if he would persuade a man to put out his eyes, the better to receive the remote light of an invisible star by a telescope." We cannot regard the Revelation of God—whether made naturally or supernaturally—as in any respect an instrument, which admits human speculations into the inaccessible territory, from which we are shut out by the structure of human thought. The use of Reason in relation to Revelation is, on its own shewing, negative rather than positive; and scientific theology is impossible, not because we want the data, but the faculty for dealing with the data. Hence it is not possible, either for Reason to construct, or for Revelation to unfold, the theory of man's relations to God. The telescope is an extension of our power of perceiving through the senses. The Works and the Word of God are not properly regarded as a scientific extension of our metaphysical Faith. If the Bible were a communication in regard to the vexed controversy regarding a Plurality of Worlds, the analogy of Locke might hold good. There is nothing in the character of human intelligence to forbid the entrance of a solution of the one problem. The logical conditions of knowledge forbid even the entertainment of a solution of the other.*

We might fill a volume, if we ventured to apply these general views, in a criticism of the treatment which Divine Revelation has received, in ancient and modern theological discussion. The history of religious controversy is, in how great a measure, the history of vain attempts on the part of speculative divines to find a Procrustes bed of science into which the Facts of natural and biblical theology may be harmoniously fitted, and of the resistance offered by the Facts to the unphilosophical treatment. The sound metaphysician receives the revelations of man's free will, and also of God's foreknowledge and foreordination,—of the exhortations to prayer, and also to human activity,—though he cannot scientifically explain their consistency; and he does so because he knows that they are the varied practical solutions of a problem which he further knows must be speculatively insoluble. His metaphysic *opens room*, as it were, for the Divine teaching, which theological rationalists—heterodox and orthodox—either reject, or torture into a semblance of consist-

* "As for perfection or completeness in Divinity it is not to be sought; for he that will reduce a knowledge into an art (science) will make it round and uniform: but in DIVINITY many things must be left *ASBRUT*."—*Advancement of Learning*,

ency with the forms of science. Neither a theory of the created universe, and of the human part of it in particular, nor a theory of the inaccessible Being on whom all depends, is revealed. They are not capable of being revealed. A child cannot be taught the full scientific significance of the Newtonian theory of the material world; but he may be taught useful rules which others have derived from it. If an infant were to apply its undeveloped reason and experience to the rules which it has thus been taught, in order to discover their most general principles, it would be acting less irrationally by far, than those who study the revelations of God to man, as if they were the scientific solution of the insoluble problem. The infant is more able to grasp the science out of which the rules issue, than human intelligence is to comprehend a science of the unspeculative knowledge, which *must* form the substance of any Revelation of God.

We have wandered too far aside from the text of the suggestive volume that has occasioned these remarks, and to only a few salient points in which we have at all alluded. We shall be delighted to learn that any of our readers are willing to pursue the course of meditation to which Mr. Calderwood's book and our disquisitions naturally invite them, and that they are disposed to travel along that highest and quite unique walk of inductive research, on which lie the natural and miraculous Facts of Divine Revelation,—in a spirit becoming those who are examining a region, in which every object is a direct illustration of a problem that the philosopher can prove to be insoluble. Defended on this course by true metaphysics against the false, the student of the "ways of God" learns that the greatest human minds have not been mistaken in assigning the loftiest place to Theology, which should be the grandest department of modern, as it was of mediæval and ancient literature. Bacon is too sanguine, when he predicts that a sober treatise on the office of human reason in Divinity "would be like an opiate in medicine, and not only lay the empty speculations which disturb the schools, but also that fury of controversy which raises such tumults in the Church." But we may perhaps hope for some less comprehensive advantage from the maxim, that "man is not born to solve the problem of the universe, but to find out where the problem begins," applied by the few to the study of all Divine Revelation, in the spirit of Bacon and Pascal.

ART. V.—*The Life and Correspondence of Charles, Lord Metcalfe; late Governor-General of India, Governor of Jamaica, and Governor-General of Canada; from Unpublished Letters and Journals preserved by Himself, his Family, and his Friends.* By JOHN WILLIAM KAYE, Author of the "History of the War in Afghanistan." 2 vols. London, 1854.

THE present work ought to add greatly to the reputation which Mr. Kaye has acquired by his former publications on Indian History and Politics. We have not many biographies of the same kind, and we have certainly few of the kind so well executed. Were it only as an example of the proper biographic mode of dealing with the unpublished letters and journals of deceased persons of celebrity, the work would deserve high praise and extensive notice. At a time when even men of some pretensions to literary eminence are discharging the biographic office in a way at once insulting to the public and injurious to the unfortunate subjects of their skill, by simply tumbling out into print, in any shape and order, all the old letters and papers they can lay their hands on, it is really pleasant to find a book like this of Mr. Kaye, in which the true duties of a biographer are so distinctly conceived and so conscientiously performed. Fully alive to the value of letters and documents, as materials for a biography, Mr. Kaye is evidently not one of those who think that the business of a biographer consists in merely collecting and editing such materials. He has not devolved upon his readers the trouble of procuring the information required for imparting connexion to the materials used, and weaving them into a continuous and intelligible story. All this trouble he has taken on himself. Hence the work, as it stands, is not merely Lord Metcalfe's Papers, edited by Mr. Kaye; it is really and strictly Mr. Kaye's *Life of Lord Metcalfe*. "I am not unconscious," he says in his preface, "that, in some parts of this work, I have suffered the biographical to merge into the historical;" and he apologizes for this on the ground that the events of Indian and Colonial history are far less known even to educated readers than those of general European history, or of the domestic history of Great Britain. The apology was perhaps not needed. It is the duty of every biographer to inweave into his narrative as much of general information relating to the matters introduced into it as may save the necessity of reference to other authorities. In the case of an Indian or Colonial biography, however, this duty is certainly more than usually imperative; and Mr. Kaye has amply fulfilled it. He has even gone to original and exclusive sources of information in preparing his work, so as to give it a char-

acter of independent historical value. Apart from this merit of extensive and original information in connexion with his subject, Mr. Kaye's affectionate admiration of Lord Metcalfe would have constituted an important qualification for his task. Nor are his powers of literary execution of a common order. With much previous practice as a writer, and master of an easy, vivid, and even sprightly style, Mr. Kaye has here produced a biography which may be recommended as, in some respects, a model for works of the same kind. From first to last, we follow the hero, Charles Metcalfe, with interest, seeing him distinctly at every point of his varied career, and becoming so attached to him in the course of our gradually increasing acquaintance, that, in the end, we feel as if we were parting from an old friend. To have accomplished this for a man of Metcalfe's stamp—not a romantic adventurer, not a leader of armies, not a brilliant and original man of letters, but a plain, painstaking man of business, whose whole life was spent in the toils of civil office and administration—is no ordinary success. There are, indeed, defects in Mr. Kaye's book. The information it supplies relative to the political and military events with which Lord Metcalfe's life was mixed up, is given perhaps in too diffuse and attenuated a manner, and is not massed out with sufficient boldness of relief, and sufficient strength and decision of colour. It may be objected also to the book, that its tone is more that of a continuous and conscious pleading in favour of its subject, than of a firm and resolute appreciation of his character and merits by a man judging vigorously and freely for himself. Altogether, however, the work is one of unusual excellence, and it would be well for the interests of the Civil Service if we had a few more such biographies.

Born in Calcutta in 1785, the second son of a Major in the Bengal Army, Charles Theophilus Metcalfe was brought over to England in early infancy: his parents having made up their minds to exchange the heat of India, before old age came upon them, for the dignified leisure of a town-house in Portland Place, and an estate near Windsor. Wealthy, active, and a Tory of the true Pitt stamp, the retired major became in time an East-India Director, and a respectable member of Parliament, with plenty of occupation for himself, and ample means of providing suitably for his sons and daughters. From the very first he destined his two eldest sons for the East. Accordingly, after the boys had been educated at Eton, where the elder, Theophilus John, was the more reckless and impetuous, and the younger, Charles Theophilus, the more mild and studious of the two, they were both shipped off sorely against their will—Theophilus John for China, and Charles Theophilus for India. A China writership was then the best piece of preferment in the world. India

Directors reserved such appointments for their own sons; and, naturally, the eldest son in this case had the preference. But the Civil Service in India was then also a splendid field for a young man who wanted to grow rich by honourable exertion during a few years; and in sending out his second son as a writer to Calcutta, the old Indian major knew what he was about.

It was in January 1801, that Charles Metcalfe, then sixteen years of age, first set foot on the land with whose history his name was to be so long and so intimately connected. He was put on shore by himself, from a boat, on one of the ghauts of quays of Calcutta in the middle of the night, and had to stumble his way as best he could to the house of one of his father's friends—an opening into life not unlike that of one of our most celebrated naval commanders, which consisted, as he used to say himself, in being pushed, at the age of thirteen, through the port-hole of a ship into the midst of a coil of rope. Metcalfe was then a homely, rather squab young fellow, with nothing dashing or handsome about him, but intelligent, gentle, ingenuous, and well instructed, and with a very decided, though far from obtrusive, consciousness of superior abilities.

That was an important time in the history of India. The British, either directly or as protectors of allied states, were in possession of a large part of Hindostan; and they had already, in the course of the conquests by which they acquired this extensive territory, given evidence of their ability to increase it indefinitely and become masters of the whole peninsula. There were, however, in India, various hostile powers, relics of the old Hindoo-Mahometan anarchy which had prevailed before the British began their conquests; and these powers were not yet convinced that the British element was assured of the supremacy. Not to mention the numerous petty states, which singly were of no avail, and only existed as so much material on which any conquering force in the peninsula could operate, there were at least four or five great powers antagonistic by their very nature to British rule. There were the powerful substantive states of various independent Mahratta chiefs. There were also various military or marauding powers of a less fixed character. In the north-west, and as yet little known, were the numerous Sikh tribes, only waiting the action of some confederating influence in order to become formidable. That, with such a sea of hostility surging along its whole frontier, and threatening at every moment to break in, the British empire in India could persevere in a policy of non-extension was not to be expected. At the utmost, it was possible for an Indian statesman only to refrain from a contrary policy as long and as patiently as events would

permit. Herein, accordingly, consisted the great difference between one class and another of Indian statesmen. Some, sharing the commercial feelings of the Company's Directors at home, were strenuous for a peace policy, pushed to its last possible limits. Others, regarding the complete conquest of India by Britain as an inevitable necessity, represented it as, after all, the wisest and most humane and most economical policy to accelerate the process, by pushing forward the British armies and advancing the British standard wherever and whenever a hostile movement on or near our frontiers afforded a fair occasion.

Of this last class of Indian statesmen was the Marquis of Wellesley, Governor-General of India at the time of Metcalfe's arrival. This "glorious little man," as he was affectionately called by his admirers, had a genius for conquest hardly less vast and aspiring than that of his equally diminutive predecessor, Warren Hastings, the founder of our Indian empire. With such efficient military agents at his bidding as Lake and his own brother, Arthur Wellesley, he was engaged, at the time of young Metcalfe's arrival, in plans for the aggrandizement and consolidation of the British dominions, at the expense of Mahrattas or whatever other power opposed our sway. But a good staff of civil subordinates at Calcutta was no less necessary for his purposes than good military agency in the field. Already, under his predecessors, Lord Cornwallis and Sir John Shore, the Indian civil service had been greatly reformed. "Instead of a race of men," says Mr. Kaye, "who were more than three-fourths traders, growing rich upon irregular and unrecognised gains, there was fast growing up an army of administrators, receiving fixed pay for fixed service, and adding nothing to their stores that was not to be found in the audit-books of the government." Lord Wellesley did his best to complete this reform. He made it a practice to select the most hopeful young civilians of the Bengal Presidency as confidential secretaries, and assistants, and clerks, to be employed at the Government-House in Calcutta, under his own eye, and trained up, as it were, in his school, and under the influence of his ideas. In justice to the memory of this remarkable man, the elder brother of the great Duke, we will quote a passage from Mr. Kaye indicating the extent and nature of his reputation in India fifty years ago.

"In that grand vice-regal school the clever boys of the Civil Service ripened rapidly into statesmen. They saw there how empires were governed. The imposing spectacle fired their young ambition, and each in turn grew eager and resolute to make for himself a place in history. Of all men living, perhaps, Lord Wellesley was the one around whose character and conduct the largest amount of youthful admiration was likely to gather. There was a vastness in all his

conceptions which irresistibly appealed to the imaginations of his disciples. Their faith in him was unbounded. The promptitude and decision with which he acted dispelled all doubt and disarmed all scepticism. Embodied in the person of Lord Wellesley, statesmanship was in the eyes of his pupils a splendid reality. They saw in him a great man with great things to accomplish. As he walked up and down the spacious central hall of the newly erected Government House, now dictating the terms of a letter to be despatched to one political functionary, now to another, keeping many pens employed at once, but never confusing the arrangement or language proper to each, there was a moral grandeur about him, seen through which the scant proportions of the little Viceroy grew into something almost sublime. There could not be a finer forcing-house for young ambition."—*Kaye*, vol. i. pp. 96, 97.

Of the young men who, about the year 1802, attracted the regards of the "glorious little man"—and whose subsequent careers were watched by him with pride long after he had left India for ever—Charles Metcalfe was one. Nothing, apparently, but the kindly attentions he received from the Governor-General during the first year of his Indian life, and the consequent admiration and affection with which he learned to regard him as the first great man he had ever known, could have enabled the poor youth to bear up against the initiating period of depression and home-sickness which all young Anglo-Indians suffer before they are acclimatised. It was not till the year 1803, however, that even contact with Wellesley had its full effects in rousing young Metcalfe's ambition, and reconciling him to his situation. In the interval, he had made a journey in the train of the Governor-General through the northern provinces, and had made his *début* in official life as assistant to the Resident at the Court of the Mahratta Prince Dowlut Rao Scindiah at Onjein. This appointment had been regarded by all Metcalfe's friends as an excellent opening for his talents. Colonel Collins, however—more familiarly known as 'old Jack Collins,' or 'King Collins'—then resident at Scindiah's Court, was a notoriously crabbed and arbitrary old fellow, not at all calculated to be an agreeable master to a sensitive young gentleman from Eton, who thought a good deal of himself; and Metcalfe soon came to a rupture with him and returned to Calcutta. Here, in 1803, he was made happy by being taken into the Governor-General's own office. Then first did his home-sickness entirely vanish, and the greatness of his Indian prospects dawn upon him. The young Etonian, as he looked at the glorious little Marquis pacing up and down the hall of Government House, and dictating a despatch, was sanguine enough to dream that one day he might be in the Marquis's place, and be the first man in India.

had just received intelligence from home that his father had been made a Baronet by the Tories, and in entering the fact in his note-book, he wrote, anticipating the descent of the Baronetcy to his elder brother, then in China, "I have little doubt that I shall raise the second branch of the family to the same honours." He was then eighteen years old, and in receipt of a salary of £1000 a-year.

Pleased with the talents and industry of Metcalfe, Lord Wellesley appointed him in 1804 to the office of political assistant to the army of Lake, then engaged in what may be called the dregs of the great Mahratta war.

"It was young Metcalfe's business to assist the Commander-in-Chief in his negotiations with the native chiefs, to carry on the necessary correspondence with the civil officers in our newly-acquired districts, to collect information relative to the movements of the enemy, and to conduct other miscellaneous business comprised under the general head of 'political affairs.' Such a functionary at the head-quarters of Lake's army was not unlikely to be called a clerk and sneered at as a non-combatant."—*Kaye*, vol. i. pp. 135, 136.

Metcalfe, however, proved that, civilian as he was, he had as much of the spirit of a soldier in him as any man in the camp. One of the most important actions of the army, during his presence with it, was the storming of Deeg, a strong Mahratta fortress about forty-five miles from Agra. This took place in December 1804; and Metcalfe not only joined the storming party as a volunteer, but was one of the first to mount the breach. This exhibition, though apparently a mere act of foolhardiness, was well calculated; for, from that time forward, Metcalfe's position in the army, and his influence at head-quarters, were greatly enhanced. Accordingly, during the whole of 1805, and a portion of 1806, we find him acting a considerable part in the transactions which preceded the termination of the Mahratta war. It is during this period, too, that we first find him entering, with heart and soul, into the spirit of Indian politics, forming judgments of his own respecting men and measures, and boldly expressing these judgments in his letters to his friends at Calcutta and at home.

The Governor-General, under whose auspices the Mahratta war was concluded, and to whose favourable consideration young Metcalfe was recommended by Lord Lake, for his diplomatic and other services, was not his old friend and hero, Lord Wellesley. The "glorious little man," whose "great game" in India, as it was called, did not at all meet the approbation of the India-hope authorities at home, had returned to England in August 1805, leaving the administration to his successor

Lord Cornwallis, who had been sent out for the second time as Governor-General of India, with strict injunctions to bring the Mahratta war to a close at any cost, and to change a policy of conquest and aggrandizement for one of financial retrenchment and improvement. Lord Cornwallis had no sooner arrived than he took steps to allay that "general frenzy for conquest and victory" which he found even in heads believed to be the soundest in India. His measures, however, for the conclusion of the Mahratta war were cut short by his premature death in October 1805, and the conduct of that intricate business devolved upon his interim-successor, Sir George Barlow, a man of similar sentiments, already distinguished among Indian financiers and administrators.

Metcalf, true to his allegiance to Wellesley, was very free in his criticisms of the peace-policy of Cornwallis and Barlow. With a great many of the soundest heads in India, and particularly with those who breathed the air of camps, he was full of the *debellare superbo* maxim which had inspired Wellesley's government, and regarded the favourable terms granted to Holkar, and the still more favourable concessions made to Scindiah, at a time when a somewhat longer prosecution of the war would have broken up the Mahratta power for ever, as the result of a short-sighted policy, derogatory to Great Britain, and likely to be expensive in the end, if seemingly economical at the moment. But, though of the Lake or Wellesley as opposed to the Barlow party, Metcalf's claims upon the service were too great to be overlooked. After a short stay at Calcutta, he was appointed, in August 1806, to the office of "First-Assistant to the Resident at Delhi"—not a very brilliant appointment in itself for a man who had done so much, but good enough during a regime not calculated to multiply splendid openings. Mr. Seton, the Resident at Delhi, was a very different man from Jack Collins—as mild and soft as Collins had been rough and arbitrary; and as Metcalf came with a high reputation to Delhi, it was with some difficulty that he could persuade Seton to treat him as a subordinate at all, and allow him to do any of the drudgery of the office. Seton, indeed, had an immense opinion of the abilities of his assistant; and during two years the two civilians continued harmoniously to manage the somewhat delicate business of the Residency—which consisted in administering the affairs of Delhi and its district, and at the same time keeping all right with the troublesome Court of the decrepit old Shah Allum, the fiction of whose imperial authority, as the representative of the old line of the Mogul Emperors, it was deemed advisable still to maintain.

The provisional Governor-Generalship of Barlow was termi-

nated by the arrival of the new Governor-General, Lord Minto; and with him came a stimulus to the stagnating politics of India. Mr. Kaye thus describes the nature of the crisis :—

“ When, in the spring of 1808, from the Council-Chamber of Calcutta, Lord Minto and his colleagues looked out upon those vast tracts of country which lie beyond the Sutlej and the Indus, and saw already the shadow of a gigantic enemy advancing from the west, it was no idle terror that haunted the imaginations of our British statesmen. The pacification of Tilsit had leagued against us the unscrupulous ambition of the great French usurper, and the territorial cupidity of the Russian autocrat. That among the mighty schemes which they then discussed for the partition of the world between them, the invasion of India was not one of the least cherished, or the least substantial, now stands recorded as an historical fact. We know now that it was nothing more than a design, but it was not less the duty of our Indian rulers in 1808, to provide against a contingency which then seemed neither improbable nor remote. The occasion was one which, if it did not warrant a demonstration of military power, at all events invited a display of diplomatic address. It was sound policy, in such a conjuncture, to secure the good offices of the princes and chiefs who were dominant in the countries which were supposed to be on the great high road of the invader. If the rulers of Afghanistan and the Punjab could be induced to enter into friendly alliances with the British Government for the resistance of invasion from the north, it seemed to Lord Minto and his colleagues that more than half of the danger which threatened our position would be at once removed. Already was French intrigue making its way at the Persian Court. That was the sure commencement of the great game that was about to be played—the safest and the wisest commencement. It was a great thing, therefore, to re-establish our ascendancy at Teheran; and a great thing to achieve the diplomatic occupation of the countries between Persia and India, before our enemies could appear upon the scene.”—*Kaye*, vol. i. pp. 239, 240.

To accomplish these objects, three distinct diplomatic missions were resolved on. The celebrated John (afterwards Sir John) Malcolm, was despatched to the Court of the Shah of Persia; Mountstuart Elphinstone, a man no less celebrated in eastern history, was ordered to proceed to Cabul; and Charles Metcalfe was taken from his assistantship at Delhi, and charged with a mission to Ranjeet Singh, the maharajah or “great king” of Lahore. Especial importance was attached to this last mission. We have mentioned, that at the time of Metcalfe's arrival in India, the Sikh tribes of the north-west, though then little known, were in reality one of the most formidable of the extra-British populations of India, waiting only the operation of some organizing or confederating influences to reveal their strength

for good or evil. Such an influence had manifested itself in the activity of Runjeet Singh. Known in 1805 but as one of the chiefs of the Punjab, he had, by 1808, reduced all the Sikh tribes on the farther side of the Sutlej under his sway, while the tribes on the left or British side were menaced by him with the same fate. In fact, Runjeet Singh and his Sikhs now occupied very much the position which had been formerly occupied by Scindiah and his Mahrattas. Even had there been no such necessity as existed for getting him on our side in anticipation of a possible French or Russian invasion of India from the north-west, it would have been necessary soon to have come to an understanding with him relative to his designs on the Cis-Sutlejean chiefs, who were appealing to the British Government for protection against him. The objects of the mission to him were, therefore, no less complex and immediate than they were important. To sound his character and policy generally; to ascertain his resources and the nature of his supremacy; to possess him in favour of the British and against the French; to make a treaty with him if possible, and secure his alliance and friendship; and at the same time to avoid giving in to his designs on the Cis-Sutlejean Sikhs, and even take him to task if necessary for his efforts in that direction—all these objects were included in the mission committed to young Metcalfe. He was to be sole diplomatist, moving with a military escort, and with a retinue of moonshees, writers, and servants, but without secretaries, advisers, or attachés, to interfere with his plans or to share his responsibility. His salary was to be 2000 rupees a month, or £2400 a year, over and above all the mission-expenses.

2 Seldom has a youth of twenty-three had so good an opportunity to distinguish himself as this mission to Lahore afforded to Metcalfe. He knew it; he nerved himself up to do his best; and the result more than answered the highest expectations that his friends had formed. The history of the mission, from the time of its leaving Delhi in August 1808, to its successful close by a treaty with Runjeet Singh in April 1809, is narrated in detail by Mr. Kaye. It is sufficient here to say, that after delays and duplicities innumerable on the part of the Rajah, who moved about from spot to spot, dodging the envoy as long as he could, and, even when he seemed to be caught, managed again and again to slip away like an eel, the patience and firmness of the young European baffled the wily Sikh, held him fast, and pinned him down to a treaty which fully settled all pending difficulties, and which for thirty years continued to regulate the relations between the British Government of India and the Sikhs of the Punjab. This treaty, one of the most important in the

history of India, was concluded at Umritsur on the 25th of April 1809.

The success of so important a negotiation at once raised Metcalfe to the highest rank among the junior Indian officials of the time; and Lord Minto and the Council set him down for the first vacant Residency. This chanced to be the Residency at the Scindiah's Court—the very office formerly held by Jack Collins. Hardly had he settled, however, into the duties of this Residency, when the transference of his friend Seton to the government of Prince of Wales' Island made it possible for Lord Minto to offer him, for a time at least, the far more congenial and dignified situation of Chief Resident at Delhi. To Delhi, accordingly, Metcalfe returned in 1811; and for a period of seven years—that is, from the twenty-seventh to the thirty-fourth year of his age—he remained at the imperial city, discharging in an exemplary manner the multifarious duties of his post. The general nature of these duties Mr. Kaye indicates as follows:—

“So Charles Metcalfe, now at the age of twenty-six, found himself the incumbent of an appointment coveted by the oldest officers of both services—an appointment which, in respect of its importance, its responsibility, and its distinction, was not exceeded by any other in India below the seats at the Council-board of government. The duties of the Delhi Residency were onerous and complex. The Residents at other Courts were simply diplomatists. They were bound to confine themselves to the political duties of their situation, and to refrain from all interference with the internal administration of the country in which they resided. But the Delhi Resident was at once a diplomatist and an administrator. It was his duty not only to superintend the affairs of the pensioned Mogul and his family, but to manage the political relations of the British Government with a wide expanse of country, studded with petty principalities, ignorant alike of their duties and their interests, and often in their ignorance vexatious in the extreme. It was his duty, too, to superintend the internal government of the Delhi territory, to preside over the machinery of revenue collection and the administration of justice, and to promote by all possible means the development of the resources of the country, and the industry and happiness of the people. . . . He had social duties to perform, as well as those of diplomacy and administration. The Resident was a great man—he had a Court of his own, and a large monthly allowance from Government to support it in a state of becoming splendour. He kept open house. He had what was called a ‘family’—all the officers attached to the Residency, with their wives and children, were members of it. In the Resident's house all passing travellers of rank found ready entertainment.”—*Kaye*, vol. i. pp. 333, 334.

To all these duties Metcalfe addressed himself with zeal and

industry equal to his ability. At no time were the relations of the British Government to the Court of the Mogul more firmly and yet more delicately managed; at no time were the interests of the populations subject to the Delhi Residency more sedulously cared for, or the laws enforcing order and obedience among these populations more mildly administered, than during the seven years in which Metcalfe was Resident. At no time, either, were the hospitalities of the Residency more liberally maintained. Old Indians still recall the days they spent at Delhi, during Metcalfe's Residency, as among the most pleasant of their eastern recollections.

Yet, during this—in some respects, perhaps, the happiest portion of his Indian career—Metcalfe was only doubtfully happy. Besides the inevitable cares and annoyances of his situation, varied and increased occasionally by a misunderstanding with his superiors, he seems to have suffered not a little from low spirits. In his letters to friends at home there is often a tone of sadness, as if, after all, life in India seemed to him only a kind of banishment from the more genial world of family ties and friendship. With all his talents as a man of business, and all his strength of character, he appears to have possessed singularly acute feelings, and a singularly gentle and affectionate nature. He had come out to India deeply in love with a beautiful girl, whom he had met shortly before his departure; and the image of this first object of his boyish affection, irrevocably lost to him, seems never to have been effaced from his memory. In various letters written during the period of his Delhi Residency, he announces his resolution never to marry, and anticipates the time when, having returned to England, he will be shunned in society as a sallow Indian bachelor, and left to his solitary walks and his solitary curry. One cause of his melancholy seems to have been a conviction that he should never see his parents alive again. His fear proved true. Sir Thomas and Lady Metcalfe both died during the last years of their son's residence at Delhi, having survived just long enough to see him on the path to a distinguished Indian fame. The baronetcy descended to the elder brother, Theophilus John, who had married in the east, and who, not long afterwards, left China and returned to Britain.

It was not, however, only as administrator of the affairs of the Delhi Residency that Metcalfe was busy from 1811 to 1818. As a man well acquainted with the political state of India generally, and feeling a strong interest in whatever occurred in any part of it, he frequently corresponded with Lord Minto, and after Lord Minto's departure in 1813, with his successor, Lord Moira, as well as with his personal friends in Calcutta and elsewhere, on political matters not specially restricted to the business

of his own political Residency. It was about the time of Lord Moira's appointment to the Governorship that symptoms began to manifest themselves, more particularly in Central India, which augured that the policy of peace and non-interference, persevered in for eight years, must speedily come to an end.

"The most peaceful rulers who ever governed our Indian empire have left to their successors a sad heritage of political convulsion, military strife, and financial embarrassment. It seems as though, in the eastern world, the moderation of our rulers could bear only the bitter fruit of war and conquest; that forbearance in one year were but the antecedent of compulsory violence and aggression in another; that the most steadfast resolutions to go so far and no farther, formed, in all honesty and all wisdom, by the least ambitious of our statesmen, could only pave the way to new victories and new additions of territory to an empire already 'overgrown.'"—*Kaye*, vol. i. pp. 383-384.

In accordance with this apparent law of our Indian history, the Governor-generalship of Lord Moira was one of war and disturbance, of the breaking up of old arrangements, and of the establishment of new ones at the cannon's mouth. First, there was a war with Nepaul, occasioned by the ravages committed by the Goorkhas on our borders (1814-15); and hardly had this been concluded, when it became necessary to have a new settlement of accounts with the four great Mahratta chiefs of Central India—Scindiah, Holkar, the Peishwah, and the Rajah of Berar—whose relations to each other, to the British Government, and to the minor Indian states, had, since the sudden winding up of 1806, fallen into a state of disorder and confusion, rendered more distracting by the appearance in the midst of them of the new marauding power of the Pindarrees. It was natural that, in such a crisis, great weight should be attached to the views of so experienced a politician as Metcalfe, whose position in the midst of the chaotic elements gave him the best opportunities of judging what was fit to be done; and, accordingly, both by written minutes forwarded to Calcutta, and by personal intercourse with Lord Moira, during his lordship's military progress, in 1815, through the upper provinces, we find Metcalfe busily indoctrinating the Government with maxims and principles such as the following:—

"Our power in India rests upon our military superiority. It has no foundation in the affection of our subjects. It cannot derive support from the good will or good faith of our neighbours. It can only be upheld by our military prowess; and that policy is best suited to our situation in India which tends in the greatest degree to increase our military power by all means consistent with justice."—*Paper on the situation of affairs in November 1814, submitted by Metcalfe to Lord Moira; quoted, Kaye*, vol. i. p. 392.

"I rejoice at this partial abandonment of the non-interference system. But I want to see it openly renounced as absurd and impracticable, in our present situation. Let our policy be guided by justice and moderation, but let us take every fair opportunity of securing and aggrandizing our power. . . . It is curious to observe how frequently we are compelled, by policy, to deviate from our fixed principles. [He then cites instances in which the Indian Government had been obliged to deviate from the non-interference policy, in spite of the strongest desire to adhere to it.] It only remains to renounce a system from which we are always compelled to deviate. Our power in India is so strangely constituted, that unless we take advantage of all fair opportunities to increase our strength, we may meet some day with unexpected reverses, and have our power shaken to its centre, if not overturned. It is doubtful, I think, how long we shall preserve our wonderful empire in India; but the best chance of preserving it must arise from our making ourselves strong by all just means—not from an absurd system, which would affect to look on with indifference at the increasing strength of others, and to trust for our existence to the unattainable character of unambitious amiable innocence and forbearance."—*Letter from Metcalfe to an official friend, November 3, 1814; quoted, Kaye, vol. i. pp. 394, 395.*

"The error seems to belong to the Government at home, which has been resolved to make everything bend to a desire to keep down the expenses, as if our expenses could be regulated at our pleasure; as if we could control events so as to render them subservient exclusively to economical and commercial views. The most effectual remedy would be—and a most necessary one it is—to reverse the system of government, and to make views of economy and retrenchment secondary to those of safety and power. Let us first adopt measures for the security and strength of our dominion, and afterwards look to a surplus of revenue. If retrenchments be necessary, let them be made anywhere rather than in that branch of our expenditure which is necessary for our existence. Let us cherish our military establishments above all others, for on them our power entirely depends."—*Memorandum on the state of Central India, submitted to the Governor-General; quoted, Kaye, vol. i. pp. 443, 444.*

We have culled these sentences from among many others of a similar tenor, as exhibiting Metcalfe's matured opinions on the most general questions of our Indian policy, at the time to which they refer. We see in them how apt a pupil Metcalfe had been in the Wellesley school, and how firmly he adhered to the principles of that school. It is unnecessary here to relate the stirring events of Indian history, in the midst of which, and with the intention of contributing to their proper conduct and settlement, these views were put forth. Suffice it to say, that Lord Moira, himself similarly inclined, was much impressed by Metcalfe's representations; that Metcalfe's more special propositions as to the mode of dealing with the various elements of the

chaos—Scindiah, the Pindarrees, Holkar, &c.—also met with acceptance, and were embodied in Lord Moira's policy; and that, consequently, the important measures of conquest and pacification, which signalized the rule of that Governor-General, and which make the years 1817 and 1818 memorable in the annals of our Indian empire, were conceived in the spirit of Metcalfe's ideas, and even in part according to the letter of his suggestions. As Resident at Delhi, Metcalfe had also personally a share in the diplomatic arrangements involved in the new settlement.

Having conducted Metcalfe to a point in his life when his title to the character of a fully developed Indian statesman was universally recognised, and his rise to the highest offices in our Indian empire was only a question of time, we may pass over the remaining steps of his Indian career more cursorily. In October 1818 he quitted, with much reluctance, his Residency at Delhi, and accepted, as a more central and conspicuous position for the exercise of his talents, the post of private secretary to Lord Moira—then just raised to the higher dignity of Marquis of Hastings, this post being purposely rendered more worthy of his acceptance by being conjoined with the analogous office of General Political Secretary to the Supreme Government. In his new position, however, Metcalfe does not seem to have found himself so comfortable as he had anticipated, and in 1820, after various other projects for his employment in a field wide enough for his merits, he allowed himself to be nominated to the Residency of Hyderabad in the Deccan.

The duties of this office were, in some respects, like, but in others very unlike, those of the Delhi Residency. The Nizam, or native sovereign of that large tract of Southern India known as the Deccan, was our ally, and in so far our dependent; but he was no mere pensioner and puppet, like the Mogul. He managed the internal affairs of his own government, or had them managed for him, by native ministers; and what the British Resident had to do was to look after the external relations of the State, as the ambassador of the paramount power, and at the same time to exercise such influence, generally, on internal affairs, as could be acquired by moral authority, and by an understanding with the British officers in the Nizam's service. When Metcalfe accepted the Residency he was told that the work would be easy, but he was far from finding it so. What with the Nizam himself, a weak and capricious potentate; what with the two rival ministers, Mooneer-ool-Moolk and Chundoolall, who divided the Nizam's power, and invariably pulled opposite ways; and what with an English banking-house established at Hyderabad by some speculators, and which, from being

a mere commercial establishment, had, by means of large loans to the Government, on the security of incoming taxes, and other such transactions, actually got into its hands the political mastery of the State—the affairs of the Deccan were one mass of corruption and confusion. In no part of India, with equal resources, was the condition of the population more wretched; and in no part was the wretchedness of the population so clearly owing to vicious administration. Thrown into the midst of such an imbroglio, Metcalfe set to work, with his usual zeal and singleness of purpose, to perform his own part in restoring order. His industry was excessive; he was never at leisure. At last he discovered the root of the evil. He wrote to head-quarters, exposing the practices of Palmer's banking-house; showing that much of the misery to which the population of the Deccan was subjected arose from the connexion subsisting between the Nizam's Government and this establishment; alleging the injury to the British name and influence in India, likely to arise from the supposed complicity of the British Government with transactions so grasping and nefarious; and pointing out what he thought the simplest and easiest means of remedy. Although he was careful, in all this, to avoid personal attacks and imputations as much as possible, he found that he had roused a nest of hornets. The partners of the banking house were men of note and distinction, and they had numerous friends in India and at home, who, without being sufficiently acquainted with the facts, were zealous in their favour. The Marquis of Hastings himself was related by marriage to one of the principal partners. The result for Metcalfe was that his proceedings were misrepresented, his position at Hyderabad rendered extremely disagreeable, and his friendly relations with Lord Hastings changed into mutual coolness and estrangement. For a time he had to bear up against obloquy, not only in India, but also in political circles at home; and, though in the end, events proved him to have been in the right, and raised his reputation for purity and efficiency higher than ever, it was with pleasure that, in 1825, he left the scene in which, for nearly five years, he had been so laboriously and so disagreeably occupied. Lord Amherst, who had succeeded the Marquis of Hastings as Governor-General, had found it necessary to make some changes in the administration of the Upper or North-west provinces of India, in order to carry out which he esteemed it of the utmost importance that Metcalfe should leave the Hyderabad Residency, and return to his old post at Delhi, nominally with his old title as Resident, but with his duties considerably modified. He was then no longer plain Charles, but Sir Charles, Metcalfe, having succeeded unexpectedly to the family baronetcy, by the death of his elder brother

in 1824. Accordingly Metcalfe, after visiting Calcutta, returned to Delhi. He was then forty years of age.

Metcalfe's second Residency at Delhi lasted but two years, (1825-27.) But these two years were years of importance,—a war of no ordinary magnitude being then in progress against the Rajah of Bhurtpore. Metcalfe's conduct during the transactions of this war—transactions on the success of which, as many thought, depended the security of our Indian empire against another general insurrection—was of a piece with his whole previous career; and it was partly in testimony of admiration of his behaviour at this crisis, although at the same time as the proper reward for his long preceding course of distinguished service, that the Directors, in 1827, conferred on him a vacant seat in the Supreme Council of India. At the time when this honour—the highest in the regular line of Indian service—was conferred on Sir Charles, he was forty-two years of age.

The salary of the office to which Metcalfe, after twenty-six years of Indian service, had thus worked his way, was £10,000 a-year. Its duties consisted in sitting at the Council-Board with the Governor-General, the Commander-in-Chief, and one other member of the Indian civil service, and, with these three colleagues, discussing all matters connected with the government of India. Mr. Kaye's account of the nature of the office is at once authentic and graphic:—

“To be a member of the Supreme Council of India, is to be almost anything that the incumbent of the office pleases to make himself. It may be to live in a state of somnolent bewilderment, idly dreaming of a prodigious array of State affairs flitting obscurely before him; to be haunted by shadows of public business which he seldom even attempts to grasp; to give a few ill-considered opinions in Council, and out of it to write a vast number of ill-shaped initials on the back of State papers, which are sent round for his perusal. Or it may be to perform the functions, zealously and indefatigably, of an overworked public servant, scorning delight and living laborious days, amidst the mass of business that crowds upon him for its discharge; to begin early and to end late, and yet never to feel that his duties have been adequately performed; to write much and to read more; to combat others' opinions, and to enforce his own; to be continually emulating the penal servitude of the Titan, and forcing the great rock of public business up the ascent only to see it roll back again to his feet. It may be, on the one hand, the *otium-cum* of the park-girt palace, or the river-side villa; or, on the other, the stern joyless life of the galley-slave, all comprised in the one word—*work*. . . . Attended by the secretaries, the Governor-General sits the members of Council on certain given days—say twice—in *ry* week. All the multifarious concerns of Government requiring adjustment in the different departments of State—in the political, the

military, the financial, the judicial, &c.—are then cursorily discussed and decided. But the real business is done at home, on the other days of the week, when the Government messengers are continually presenting themselves at the houses of the members of Council, bearing certain official-looking, oblong boxes, containing State papers to be examined and minuted by the councillors. Rough-hewn by the secretaries, important despatches, or minutes and memoranda on which despatches are to be based, are sent round for inspection and approval. Then the member of council either writes his initials on the draft, and passes it on without further comment, or he seats himself down to his desk, and draws up an elaborate minute on the subject. These minutes take the place of speeches delivered by the members of popular assemblies. They contain an expression of the individual opinions of the writer, supported by such facts and such arguments as he can bring to his aid. Thus is it, as was said by a distinguished living statesman, that ‘eloquence evaporates in scores of paragraphs.’ But the paragraphs have often more of ‘eloquence’ in them than the halting sentences which make up the oral discourses which would appropriate the name. Now, it is just in proportion as the contents of these boxes of State papers are examined and commented upon by the member of Council, that his life is one of dignified ease or interminable toil.”—*Kaye*, vol. ii. pp. 161-163. ..

The reader may guess in which of the two classes of councillors—the otiose or the busy—Sir Charles Metcalfe enrolled himself. From his biographer’s account, we judge him to have been one of the most conscientious and laborious members of Council that India ever had. The whole government of India, as Mr. Kaye hints in the above paragraph, is conducted by writing—minutes and letters taking the place of Parliamentary speeches; and Sir Charles Metcalfe was an indefatigable minute-writer. On almost every subject he would form his own opinion, independently of the Governor-General and his other colleagues in Council; and, as it often happened that in this opinion he stood alone, he considered himself bound, on all such occasions, to give his reasons in full, and to argue the point with his colleagues. This plan he pursued during the remainder of Lord Amherst’s governor-generalship, and also, with even greater laboriousness and strictness, during that of Amherst’s successor, Lord William Bentinck, (1828-1834.) At first, the relations between this celebrated nobleman and Sir Charles Metcalfe were somewhat stiff and formal; they soon learned, however, to appreciate each other, and even while differing in matters of policy, to be warm and intimate friends. A sentence or two, quoted either from Mr. Kaye himself, or from the extracts given by Mr. Kaye from Metcalfe’s minutes and correspondence during this period of his career, will serve to indicate some of his general notions on the vexed questions of

our Indian administration. One sees in them the remains of the old Wellesley spirit, considerably modified, however, by age and experience.

Metcalfe's notion of the instability of British rule in India.—"True to the faith of his younger days, he always consistently opposed any diminution of our means of military defence. . . . He was wont familiarly to say that we were sitting on a barrel of gunpowder, and that the explosion might take place any day when we were least expecting it. His writings, public and private, whenever they touch upon the general question of our rule in the East, are all more or less pervaded by this one leading idea. He was, to use his own words, ever 'anxiously alive to the instability of our Indian empire.'"—*Kaye*, vol. ii. pp. 187, 188.

Disposition to retrenchment, and scepticism as to large schemes of material improvement undertaken by Government.—"But, in proportion to the clearness with which he recognised the necessity of an undiminished expenditure in that one direction [the military service] was the zeal with which he pushed his proposals for retrenchment in every other quarter. He used to say, half jestingly, half sorrowfully, that he was afraid his colleagues would regard him as a Goth. He was sceptical, indeed, of the advantages to be derived by the people of India from some of those grand material improvements on which, in these days, the greatest possible stress is wisely and properly laid, as agents of enlightenment and civilisation. It must not be forgotten, however, that a quarter of a century of the most wonderful progress that the world has ever seen, has elapsed since Charles Metcalfe, who was in many respects before the age in which he lived, wrote and recorded minutes questioning the benefits to be conferred on India by steam-ships, telegraphs, and roads. In these departments, and in many others—as mints, surveys, and grants to the Agricultural Society—he initiated proposals for the reduction of the expenditure. He was eager to pare the exuberance of all costly overgrown establishments, and to abolish all offices of questionable advantage to the State."—*Kaye*, pp. 188, 189.

Notion that the village community is the permanent and fundamental molecule of native Hindoo society, and that the village system ought to be sedulously kept up.—"The village communities are little republics, having nearly everything that they want within themselves, and almost independent of any foreign relations. They seem to last where nothing else lasts. Dynasty after dynasty tumbles down. Revolution succeeds revolution. Hindoo, Patan, Mogul, Mahratta, Sikh, English, are all masters in turn, but the village communities remain the same. . . . If a country remain for a series of years the scene of continued pillage and massacre, so that the villages cannot be inhabited, the scattered villagers nevertheless return whenever the power of peaceable possession revives. A generation may pass away, but the succeeding generation will return. . . . This union of the village communities, each one forming a separate little state in itself, has, I conceive, contributed, more than any other cause, to the

preservation of the people of India through all the changes and revolutions which they have suffered, and is in a high degree conducive to their happiness and to the enjoyment of a great portion of freedom and independence. I wish, therefore, that the village constitutions may never be disturbed, and I dread everything that has a tendency to break them up. I am fearful that a revenue settlement, separately with each individual cultivator, as is the practice in the Ryotwar settlement, instead of one with the village community, through their representatives, the head men, might have such a tendency."—*Extract from a minute of Metcalfe's, dated Nov. 1830, quoted by Kaye, vol. ii. pp. 191, 192.*

Notion of the best system for the British administration of India.—"Were I myself to venture on a proposal to new-modify our civil administration, I should recommend, as the arrangement in my mind best suited to the character of our native subjects, and best calculated to promote their happiness, the division of the country into small districts, in each of which a European officer should be superintendent, uniting all authorities in his own person, and having under him native officers for the administration of the district in all branches—several of these districts to be formed into a division under the control of a superior officer or commissioner, exercising united authority in all branches; and the commissioners to be subordinate to one general superintending authority at the Presidency."—*Minute, July 1831, quoted as above, pp. 192, 193.*

Distinctions of privilege, &c., in India.—"I regret the distinctions which exist in laws, rights, privileges, and communities, among the several classes of subjects inhabiting the territory under British rule in India, and I think it desirable that all exclusions and disabilities under which any class may labour, whether European, East Indian, or native, should be removed and abolished as soon as possible."—*Minute, July 1831, quoted as above, p. 193.*

Interference and non-interference with native States.—"As a diplomatic agent, I have had a part in carrying into effect both interfering and non-interfering policy; and the result of my own experience has left two strong impressions on my mind; *first*, that we ought not to interfere in the internal affairs of other States if we can avoid it; and, *secondly*, that if we do interfere, we ought to do so decidedly, and to the full extent requisite for the object which we have in view."—*Minute, August 1835, quoted as above, p. 196.*

Persia, Russia, and India.—"Were we to expect any essential aid from Persia, in the time of our own need, we should most assuredly find ourselves miserably deceived and disappointed. If ever Russia be in a condition to set forth an army against India, Persia most probably will be under her banners."—*Minute, June 1828, quoted as above, p. 197.*

Notion that the Indus is the proper boundary of our Asiatic Empire.—"Had he (Metcalfe) remained supreme in India, not a man would have been moved across the Indus."—*Kaye, vol. ii. p. 200.*

For the seven years (1827-1834) during which Sir Charles

Metcalfe occupied a seat in the Indian Council, under the successive supremacies of Lord Amherst and Lord William Bentinck, he was incessantly recording such opinions as the above, with many others of a more particular character, in written minutes, and labouring to carry them out in practice. Add to these official duties the social duties devolving upon him in virtue of his high station, and an idea will be formed of the busy life he led at this time. With £10,000 a year of official salary, a considerable fortune accumulated out of the savings of his previous service, and the family property attached to his baronetcy in addition, Metcalfe had ample means for sustaining the hospitality proper to his rank in the East. His disposition accorded with his means. His spacious residence in the river-side suburb of Calcutta was perpetually full of visitors, whom he entertained in a princely manner. "His dinner-parties were the best, and his balls the most numerous attended in Calcutta; and everybody said, that such noble hospitality was almost without a parallel even in the most lavish of times." Still the satrap remained a bachelor,—kind to all, and with a singular tenderness of personal attachment to his male friends, but unflinchingly faithful, in the feminine department, to the memory of the long-lost beauty that had won his boyish heart more than thirty years before at a ball in Portland Place.

At length came the crowning honour of Metcalfe's Indian career. He had been appointed Governor of the newly created Presidency of Agra; he had, as Senior Civil Member of Council, acted in Lord William Bentinck's place during that nobleman's illness: but it was not till March 1834, that, in consequence of Lord William's return to England, he succeeded, by virtue of an Act of the Home-government, providing for such an emergency, to the office of Governor-General of British India. He was then forty-nine years of age. The appointment was only provisional, until the Ministry and the Court of Directors should agree as to Lord William's successor. For a considerable time, however, it did not seem improbable that Sir Charles Metcalfe would be appointed permanently. There was a strong party in his favour at the India House; and it was only the determination of the Melbourne Ministry, then in office, to make the Governor-Generalship a political appointment, as heretofore, that prevented the India-House authorities from carrying their object. Various candidates were talked of, and among them Lord Palmerston; and the office was still vacant when the Whigs were turned out of the administration, and Sir Robert Peel's short Government came in. In 1835 the new Ministry appointed Lord Heytesbury to the Indian proconsulate. But he had not sailed when Melbourne and the Whigs again came in, his

appointment was cancelled, and Lord Auckland nominated in his stead.

To Lord Auckland, accordingly, Metcalfe, in March 1836, resigned the supreme government, after having exercised it for two years. These two years, however, had, in some respects, been the most brilliant in his career of Eastern statesmanship. It so chanced, that during Metcalfe's provisional tenure of the great Indian proconsulate, a question of vast importance in the administration of that part of the world, which had been long ripening under his predecessors, came up for final decision. This was the question of the liberty of the Indian press. The first journals which had sprung up in British India in the Warren Hastings times had been reckless, scurrilous, and licentious in the extreme—mere literary pabage, suited to a not very scrupulous or moral state of society. The only security against libel and outrage in the Indian papers of that day was a cudgel or a bribe in cash. Under Lord Cornwallis and Sir John Shore the Indian press became more respectable; and local news and weak politics of a harmless nature sufficed for its purpose. During the graver times of Wellesley's administration, when the French were intriguing in India, and our rule seemed tottering, newspapers were an intolerable nuisance to the men in power; and the little Marquis established a strict censorship, and made no scruple of laying hold of a troublesome editor and shipping him home. The same despotism was kept up in Lord Minto's time; and though Lord Hastings was more liberal and lax, unfortunate gentlemen of the press were still liable to deportation. John Adam, who exercised the provisional administration between Lord Hastings and his successor Lord Amherst, was a civilian of the old Tory school, to whom the notion of a free press seemed an absurdity. He ruined editors, right and left; and smashed Mr. Buckingham. To evade his summary style of proceeding with British subjects who edited or were connected with newspapers, journals were issued in the names of natives, who could not be deported. And so, by various shifts, the press contrived to live. Lord Amherst was obliged to relax the stringent regulations of Mr. Adam. Lord William Bentinck, a Liberal to the core, went farther; he encouraged the press, snapped his fingers at its attacks on himself, and thought its freedom an immense good. It was reserved, however, for Sir Charles Metcalfe to give to the emancipation of the Indian press the force and the form of law. He had always theoretically taken the liberal view of the question; he had, as a member of council, protested against the only act of Lord William Bentinck's government, infringing the freedom of the press; it was with peculiar satisfaction, therefore, that, in 1835, he availed

himself of his position, as temporary viceroy, to abolish the old Press Regulations, and establish a new press-law similar to that of England. That the opportunity for so popular an act of statesmanship occurred during Metcalfe's proconsulate was a piece of good luck. Still his firmness in using the opportunity, when it was by no means an axiom either in Downing Street or in Leadenhall Street, that the Indian press should be free, entitles him to all the credit he actually received. That credit was not small. He was applauded in Calcutta as the liberator of the Indian press; and a public library and literary institution was erected to commemorate the event, under the name of Metcalfe Hall.

Although disappointed of the viceroyalty in full, Metcalfe was quite prepared to remain in India in any position which would not degrade him below that he had already attained—in other words, which would leave him second only to Lord Auckland. He did not feel, however, that this condition was fairly complied with. It is true, he had received from the Crown the honour of a Grand Cross of the Bath, to be added to his hereditary baronetcy; and he had likewise been a second time and a third time nominated to the provisional viceroyalty, in case of accident to Lord Heytesbury or Lord Auckland. But his governorship of Agra having been changed into a deputy-governorship, by the abolition of the Agra presidency, he felt himself entitled to the first vacancy that would restore him to his lost rank; and his claims in this respect having been overlooked, by the appointment of Lord Elphinstone to the government of the Madras presidency, he thought himself justified in requesting some explanation on the subject from the India-House Directors. The explanation was not given; and in August 1837 Sir Charles Metcalfe resigned his connexion with the Indian service. In February 1838 he embarked for England, after an unbroken absence of thirty-seven years. He was then in his fifty-fourth year. Barquets, addresses, and testimonials of all kinds signalized his departure from India.

Behold, now, our elder, but not old, Indian restored to his native land, walking once more amid scenes familiar to his boyhood, and almost forgetting, amid their novel impressions, the long years which he had passed, since he last saw them, amid the scenes and objects of the tawny East. From Clifton, where he resided for a few weeks with a married sister, he came to London. It was during the bustle of the Queen's coronation; and, though he saw some old friends, and, among them, the Marquis of Wellesley, people in general were too much occupied to look after an ex-Governor-General of India, or to take any trouble about giving him a welcome. He removed to his family

property at Fern Hill, and set up house as a retired nabob. Familiar as he was, however, with princely Eastern expenditure, the expenses of a gentleman's establishment in England were such as to terrify him, and he meditated breaking up his large household and subsiding into lodgings or hotel-life in London, as a comfortable bachelor. His great object was to get into Parliament—a field of action in which, he trusted, he could work congenially, and also distinguish himself. Although he had gone out to India an enthusiastic admirer of Pitt, and though his father had been all along a consistent Tory of the old school, the tear and wear of Indian life had taken all his British prejudices and exclusiveness completely out of him; and, had he appeared on any hustings, it would have been as a Radical of the most pronounced school. He was against the corn-laws, church-rates, and Protestant ascendancy in Ireland; and in favour of an extended suffrage, vote by ballot, short parliaments, and the exclusion of bishops from the House of Lords. With these sentiments, and with £100,000 at his banker's, he would not have been long in finding a constituency to suit him; he was already negotiating with one or two; and parties interested were already anticipating the somewhat curious phenomenon of a Radical ex-viceroy of India in Parliament, when the Whigs relieved themselves of the probable inconvenience, and at the same time did an excellent service to the State, by begging Metcalfe to go out and govern Jamaica for them. He sailed for Jamaica in September 1839.

Probably no more difficult task could have been devolved on a man than the government of Jamaica at that moment. Six years had elapsed since the Negro Emancipation Act; the provisional apprenticeship-system was over; and the great party-war between the ruined planters, who saw their estates relapsing into wilderness, for want of labour, and the negroes, now in the enjoyment of plenty, without the necessity of labouring more than they liked, was raging virulently throughout the island. The stipendiary magistrates and the ministers of religion, above all the Baptist ministers, took the side of the negroes; and backed them in their continually increasing claims as against their former masters. Metcalfe's predecessor in the government, as the representative of the feelings and wishes of the mother-country at this crisis, was naturally on the same side. In these circumstances, the Representative Assembly of the island, composed of planters and their agents, declared themselves in permanent opposition to the government, and had recourse to a system of dogged inertia,—that is, refused to pass any measures, or to transact any business not indispensable for cash purposes,—until the grievances of the planters should have been redressed. The

Whigs at home had no option, in this dilemma, but to suspend the constitution of the island, and vest the rule in the Governor and his council of twelve, to the exclusion of the Assembly. Sir Robert Peel, indeed, turned them out on this measure; but, as he was unable to form a ministry, they returned to office, and a mild modification of the original bill passed. The real want, however, was a man to be sent out as governor, in whose hands the unconstitutional powers which the bill authorized would be safe. Sir Charles Metcalfe was chosen; the feeling being, that a man who had, in his official career among the whites and the dark-skins of the East Indies, shewn such skill and tact and temper, could not feel himself quite out of his element among the whites and blacks of the West Indies. It was not expected that he or any other man could, as Governor of Jamaica, solve the great social and economical questions which were then distracting the island—that he could provide a remedy for the want of labour, and so take the sting of present local disaster entirely out of the measure which the spirit of universal philanthropy had forced upon the island for the behoof of the rest of the world. All that was expected, all that was possible, was, that by judicious and firm conduct, he should tide over the present difficulty; temper disaster as much as possible to the one party, and correct and abate as much as possible the high-handed exultation of the other; and so fairly commit the solution of the problem to the action of time and circumstance. And this work he performed most successfully. He remained in Jamaica not more than one year and a half, (October 1839—May 1841); but during that time, so strenuously did he devote himself to the task of soothing and beating down party-spirit, and so dexterously and gently did he use his power, that the unconstitutional authority with which he had been vested in case of necessity hardly made its appearance at all, and the affairs of Jamaica began once more to flow in the channel of order and routine. His chief difficulty was with the Baptist missionaries; but even with them his suavity and his firmness produced their effects; and when he left Jamaica, the gratitude and respect of all classes followed him. It was felt that what it had been possible for a man in his situation to do towards expediting the solution of the grand question of the day, he had done; and, moreover, his special enactments for the reform of the judicial and administrative system of the island had been neither few nor small. At this day his memory is cherished, both by the blacks and the whites of Jamaica, as that of perhaps the best governor they have ever had.

At the time of his second return to England in 1841, Sir Charles Metcalfe was fifty-seven years of age. He was still

hale and hearty, and, notwithstanding his long residence in hot climates, had the appearance of a bluff Englishman, who had many more years of life in him.* He again looked forward to closing his career as a Radical member of Parliament and leading man in home-politics. The only sign about him which could have caused any alarm to himself or his friends was, that an ulcerous affection of the face, which had first made its appearance during his last years in India, for which he had consulted Sir Benjamin Brodie on his return from the East, and which, notwithstanding the local application of caustics, zinc ointments, and other remedies, had grown worse during his residence in Jamaica, had now apparently become confirmed and ineradicable. He did not anticipate any immediate danger, however; and while submitting to painful medical treatment for the chance of cure, went about as usual. As before, the official personages of the metropolis were somewhat slow in seeking out the returned proconsul who had done so much for them and the country; and he began to feel as if he were ungratefully treated. An invitation to dine with the Queen—on which occasion he met Sir Robert Peel for the first time—set all right; and Sir Charles Metcalfe, with his Jamaica experience added to his Indian, was again at the beck of the Crown for any service of sufficient dignity to which he might be thought competent. It was not long before he was again called upon to undertake a difficult proconsulate. The Whigs, three years before, had sent him to save Jamaica; and the Tories now, taking no account of his dormant Radicalism, sent him to save the Canadas. The offer of the Governor-Generalship of Canada was made to him in a letter from Lord Stanley, as colonial secretary, in January 1843, and he immediately accepted it.

The month of March 1843 saw the ex-governor of our East Indian empire, and our largest West Indian dependency, making his way on sledges, and wrapped in furs, through the snows of an American winter, to the seat of his Canadian government. "Governor Metcalfe, you'll admit, I think, that this is a clever body of snow for a young country," was the salutation made to him by a Yankee functionary on his way through the United States to Kingston. The difference of climate between his new and his former governments, was but a metaphor of the deeper difference he was to encounter in the matter of the political and social relations in the midst of which he was now called upon to act. He had dealt with sleek soft Hindoos and hot Mahometans in India; he had dealt with thick-headed blacks, and cunning

* We regret that Mr. Kaye has not prefixed to his work a portrait of Metcalfe—an omission of importance in such a biography. A map or two in the Indian part of the book might also have been of use.

creoles, and enraged white planters in Jamaica; he was now called upon to deal with a far more unmanageable population of pure whites—English, Irish, Scotch, French, and American, in their origin—full to the brim of theories of “responsible government,” scarcely less irreverent in reality towards the British Crown than their Yankee neighbours, and as accustomed to vent their opinions and their virulence against each other through the press and public meetings. The real question in Canada, in fact, was, whether the Governor-Generalship, as the tie between the dependency and the mother country, should be anything or nothing; whether Canada should be governed by an Executive Council of ministers put in office by the majority in the Canadian House of Representatives, and changed according to the state of parties in that House, just as the ministry is changed in Britain—the Governor-General accommodating himself to these changes, and shifting from party to party, as he best could; or whether the Governor-General should possess in himself an element of power and prerogative capable of penetrating to the country through the conflict of parties. It was to solve this question in the way in which the Home-Government wished it solved—in other words; it was to retain the Canadas as a portion of the British empire—that Metcalfe was sent out. He had hard and delicate work of it; but, on the whole, he succeeded. It was not long before he came to a rupture with the leaders of the dominant Canadian party—Sullivan, Morin, Aylwin, Lafontaine, Baldwin, and others—men of Irish, French, or American origin, and thoroughly democratic ideas. He refused to cancel an appointment he had made, and they resigned their offices as councillors. Canada was excited from end to end; the Parliament was prorogued; vehement speeches were made and articles written against “old square-toes,” as the Governor was called; but “square-toes” though mild was firm, and persisted in maintaining that he could not, as representative of the British Crown, allow Canada that kind of “responsible government” which consisted in government by a leading faction. To prove his impartiality, he would not throw himself into the hands of the Conservative party who would have carried him through the crisis; but gathered around him a few men who acquiesced in his views, and consented to conduct the government under him. He was obliged at length to dissolve the Assembly. The result of the new elections, however, being in his favour, the victory was his; and, for the time at least, Canada was saved to Great Britain. Here, also, as in the case of Jamaica, all that Metcalfe did, or could do, was to smooth over a temporary crisis, and leave the solution of the problem actually involved to the ripening agency of time. He had not been sent out to set at rest the

question as to the degree of self-government which Canada should enjoy ; he had been sent out expressly to ~~retain~~, for the time, on behalf of the mother country, a certain negative or restraint on the tendency of the colony towards independence ; and the skill with which he performed his appointed task is not the less to be admired that the task was temporary, and that, since he was Governor, Canada has been allowed to go on more freely in her own way. Moreover, considering his circumstances at the time, there was something heroic in the patience and bravery with which he fought out so harassing a business. At the time when he was resisting the attacks of the energetic Canadian democrats, and abating the fury of the opposite faction, and transacting all the work of his office when that work was doubled, he was, to his own knowledge, dying by inches. The cancer in his face had made such ravages, that the only question was how many months longer his painful life could possibly be protracted. The torture of new medical operations was borne in vain ; at length, his articulation was affected, and he could hardly go out. In one of his letters he writes, " there is a hole through the cheek into the interior of the mouth." In the midst of these sufferings, the extent of which was not known to the ministers at home, letters brought him the intelligence that, by the recommendation of Sir Robert Peel, the Queen had been pleased to bestow on him a peerage in consideration of his eminent services. The news reached him early in 1845 ; and a few months later, feeling his end approaching, he begged leave to resign his Governorship. The Government at home hastened, with many expressions of sympathy, to relieve the dying man ; he remained at his post till his presence was no longer necessary ; and in December 1845, he again set foot in England.

A few months of lingering and painful decay were now all that remained of the life of Lord Metcalfe. In the spring of 1846, his closed carriage was to be seen in the drive in Hyde Park, and the fashionable world taking their pleasure there would catch glimpses of the poor bandaged face within. Old friends vied with each other in their condolences ; and testimonies of respect from public bodies, and from the scenes of his former rule, came plentifully in. Addresses from Canada were not wanting. Ill as he was, he wrote letters of reply ; attended to the other duties which courtesy required of him ; and even took an interest in the political affairs of the day. In July he left London for a country retreat at Basingstoke ; and here, surrounded by his nearest relatives, patient and gentle to the last, and expressing, with his latest breath, the hopes and beliefs of a Christian, he died on the 5th of September, in the sixty-second year of his age. He was buried in the parish-church of Wink-

field, near his family estate of Fern Hill; and on a marble-tablet in that church is the following inscription to his memory, contributed by Mr. Macaulay—an epitaph so singularly exact in its terms, that in the pages of general history no other epitome will be needed of the life of Charles Metcalfe:—

“Near this stone is laid Charles Theophilus, first and last Lord Metcalfe, a statesman tried in many high posts and difficult conjunctures, and found equal to all. The three greatest dependencies of the British Crown were successively entrusted to his care. In India, his fortitude, his wisdom, his probity, and his moderation, are held in honourable remembrance by men of many races, languages, and religions. In Jamaica, still convulsed by a social revolution, he calmed the evil passions which long suffering had engendered in one class, and long domination in another. In Canada, not yet recovered from the calamities of civil war, he reconciled contending factions to each other and to the mother-country. Public esteem was the just reward of his public virtue, but those only who enjoyed the privilege of his friendship could appreciate the whole worth of his gentle and noble nature. Costly monuments in Asiatic and American cities attest the gratitude of nations which he ruled; this tablet records the sorrow and the pride with which his memory is cherished by private affection. He was born the 30th day of January 1785. He died the 5th day of September 1846.”

There are many reflections which the survey of a life like that of Lord Metcalfe is calculated to suggest. We shall indicate one or two which present themselves to us as perhaps the most obvious.

In the first place, then, the survey of such a life is calculated to bring impressively to notice the fact—otherwise known, indeed, but which we often forget—that there is always going on, over the world, an immense quantity of negotiation or business, necessary for keeping society peacefully and healthily together, and requiring for its due performance a vast amount of aptitude and talent; and yet transacting itself so much, as a matter of course that we hardly take any retrospective account of it, or of the merit involved in it. There are two views as to the manner in which this mass of negotiation, business, administration, official activity, or whatever we choose to call it, has come to exist. Some regard it as the accumulated result of a necessary action of men upon each other towards the production of rule and system, and hold that, inasmuch as there will always be superiority somewhere, and as this superiority will always be impressing itself upon what is inferior, and altering old arrangements, and making new ones, the necessity of official and administrative agency in the world will never cease. Others hold that all official business and machinery are of purely negative value—that

is, that their end is not to add anything positive to society, but only to act preventively, so as to diminish the tendency which exists in each part of society to violate the liberty of the rest; and that consequently, as society advances, and the habit of mutual non-interference becomes more ingrained in the human constitution, there will be no work left for our cumbrous machinery of law, government, and official management, and it will cease to exist. According to this view, all governing and official arrangements are simply devices necessary in a rude state of society for preserving the equilibrium: according to the other, they contribute positively to civilisation. But, whichever view is adopted, it is clear that, in the present stage of the world, a vast quantity of official and administrative agency is necessary for the cohesion of society in every part of the globe—more necessary in some parts than in others, but necessary in all. In other words, in no part of the world which we are acquainted with can a civil service be dispensed with—that is, an apparatus for submitting the mass of men to a central authority, for giving to events as they arise a certain predetermined direction, for bending human wills and regulating the social movement. For the purposes of mere cohesion, if for nothing more, every society must set apart a portion of its members, and invest them professionally with the functions of the civil service, retaining more or less power to call them to account. In every community a certain number of men must sit at desks, write letters, hold conversations, negotiate agreements, and the like, in behalf of the community as a whole, and towards certain ends which the community is supposed to aim at. Look at Metcalfe's life. Is it not clear that when he was sent to negotiate with the Sikh chief, Runjeet Singh, so as to fix the relations of British India to the Punjab—or, again, when he was placed at Delhi in the midst of a debris of Hindoo chieftaincies and principalities, among which he was to act for British interests—or, again, when he was similarly placed in the Deccan—or, again, when he was a member of the Supreme Council of India, impressing his notions, by means of minutes, on the face of the whole peninsula—or, again, when he was Governor-General—he was, in each and all of these situations, performing work absolutely indispensable at the time, if Indian society was not to be allowed to fly to pieces? So in Jamaica, and so in Canada. There were in these countries real exigencies for which an immediate outlay of activity was required; and from an idea of his fitness for these exigencies Metcalfe was chosen first to govern the one and then the other. And Metcalfe was but one of a thousand scattered Englishmen and Scotchmen all labouring in a similar manner, some in swamps and jungles, some in cities, some with the tongue, some

with the pen, in this same business of colonial government and administration. In Mr. Kaye's book we meet with the names of many Indian contemporaries of Metcalfe—Sherers, Malcolms, Bayleys, Coles, Swintons, Russells, Elphinstones, Edmonstons, Adams, Lushingtons—all engaged, along with him, some in one department, some in another, some with *éclat* and others in comparative obscurity, in managing for British purposes the thousand-fold elements of that motley-tawny population of Hindoos and Mohamedans, the temporary rule of which Britain had undertaken. The tide of time has rolled over these men and all that they did, so that only old Indians associate with their names any accurate notion of what their tasks were and how they performed them; and yet we know that, as certainly as a particular sulphate consists of a particular acid induced on a particular alkali, so certainly would the present state of India not have been what it is but for the infusion of the life-long activity of these very men, and no others, into the last half century of its history. And this, accordingly, is the great point—that, as a civil service everywhere exists, so the functions of that service may be performed ill, well, or indifferently. However low we estimate the power of individuals as compared with the action of general causes and tendencies, we cannot but allow that it may have depended on the fact that it was Metcalfe, and no one else, that went in the year 1839 to govern Jamaica, that that island was not plunged into the horrors of a war between blacks and whites; and that it may have depended on the fact that it was Metcalfe, and no one else, that was sent in 1843 to govern Canada, that that colony has not thrown off allegiance to Britain, and set up as a republic, or attached itself to the American union. This it is that makes a good biography of an efficient civil servant—such as Mr. Kaye's "*Life of Metcalfe*"—so valuable an addition to our literature. We have had plenty of lives of naval and military commanders, the brilliant nature of whose exploits, and the greatness of the changes in which they assist, attract the eye to them; but it is a good sign that we are beginning to be aware of the importance of that steadier and less obtrusive species of social management which the civil service represents, and that accounts of men eminent in this service are beginning to be in demand. American literature has more works of this kind than our own.

But, farther, the life of Metcalfe illustrates the fact, that excellence in the civil service, superior skill in the business of administration, negotiation, and the like, is to be acquired by, and cannot properly be acquired without, a special education and training. This, indeed, is a truth which might readily be known without demonstration. Government, administration,

negotiation, are particular exercises and applications of human faculty, and, in so far, are capable of being erected into professions, and made matters of apprenticeship and discipline. The mere power of sitting at a desk for so many hours a day, and writing or copying so many folios, does not come by nature or by academic culture; it is a power which only drill can give. So with the art of negotiating a bargain, intimating a decision, or terrifying a Sikh or a Caffre chief. Long ago, Socrates used to insist on the fact that there was an art of governing, capable of being specially learnt, just as there was an art of steering a ship known only to those who had acquired it. At the present day, however, when society teems with politicians, and when many a man who cannot govern his temper thinks he could with ease govern Canada, this truth is well-nigh forgotten. The business of governing is like that of writing leading articles or driving a gig—all men think they can do it, till they try it. The life of Metcalfe is calculated to supply a corrective to this error. With very superior natural endowments, there can be no doubt that Metcalfe owed his acknowledged skill and dexterity as an administrator and diplomatist to the circumstance that he had been apprenticed in his seventeenth year to administration and diplomacy as a profession, and that during his whole life he had been subjected to a training in this profession, rising gradually from subordinate to higher places, and carrying all his experience and power of self-control along with him. It is even worthy of remark, in this connexion, that he always stuck, as resolutely as he could, to one line of service—avoiding the revenue and judicial departments, and keeping to the political, as that for which he had a taste, and in which he wished to excel. It is, then, a fact of consequence, that, though the civil service in all its branches will flourish best when it is best stocked with general faculty, yet that faculty must be trained within the service itself, and trained differently for different branches of it. Society can stand much better the trained action of official mediocrity, than the random action of genius unaccustomed to harness. Hence—and Metcalfe is an instance in point here, too—there is something perhaps provisionally advantageous in that habit which still so largely exists in Britain, of drawing our legislators and governing officials from a limited number of families, constituting a kind of hereditary governing caste or aristocracy. The mere thought of being born to the profession of governing is, in itself, a part of the necessary training. A young Marquis of A., a young Lord B. C., or a young Sir D. E., looking forward from his childhood to Parliament and official life as his profession, imbibes certain traditions which are of use to him, and, indeed, in many cases, undergoes a special drilling, which, how-

ever dull he is, makes him more at home in his hereditary business than a man of equal or even of better parts, not so trained, would be. Metcalfe was not exactly born a member of the British governing caste; but he was born a member of the colonial governing caste. His father was an East India Director; he was pushed into the Indian service as a matter of course; and his subsequent career was the result of a comparative trial of his qualifications for that service as compared with those contemporaries who were pushed into it in a similar manner. Perhaps he owed something of his success during the earlier part of his career to his father's wealth and position in the India House; but, on the whole, his promotion seems to have been fairly earned by desert. His reputation, at all events, among his coevals, was always that of a first-class man. How he would have fared under a more open system of initial admission into the service we cannot say. This, indeed, is the chief improvement which the movement for a reform in our civil service promises—that, with a command of the best natural talent, and the highest accomplishments to be found in society at large—and not as hitherto in certain portions of it either aristocratic or connected with the aristocracy—provision will also be made for the special training of that talent and those accomplishments for the uses for which they are destined. As soon as this change extends itself to the higher offices, the reform will be complete, and a governing caste in the present sense will exist no longer.

Again, the life of Lord Metcalfe is interesting, as presenting to us, for closer study, a specimen of at least one fine type of the official or administrative character. There is no doubt that Metcalfe was not a man of profound, original, or very comprehensive genius. Never, in the course of all that Mr. Kaye quotes from him, do we alight upon one large generalization, one massive thought, one brilliant or piercing perception of what lies below the surface, one trace of a great or daring spirit. He was not one of those men of action whose action is based on a reserve of great general principles respecting men or things, or is dictated by a swift and splendid inventiveness. Among his contemporaries in the world of statesmen, and even among his contemporaries in Indian and Colonial administration, there were men greater than he in these respects. The passages we have quoted from his Indian minutes give the measure of his intellect as a man capable of generalities, even in the particular fields of his labour; and they exhibit a sound force of understanding, and nothing more. Notwithstanding what his biographer says of his letters and minutes, they seem to us sensible, and though clear and well written, somewhat diffuse performances, not much removed above cultured commonplace.

On the whole, we should not call Metcalf, from what we can learn of him, a great statesman, or even a great proconsul. He had neither a sufficient stock of large conclusions, nor sufficient daring and inventiveness, to have enabled him to grapple with the great problems either of British or Colonial society. But as a negotiator—as a man appointed by others to do certain official work, the limits of which were prescribed by higher authorities—or even as a man capable of dealing with difficulties and obstacles in administrative practice—he presents a singular combination of qualities. A sound and strong understanding, the culture of a gentleman, unimpeachable integrity and conscientiousness, generosity and liberality of dealing, great industry and powers of work—these are qualities essential in all men placed as he was; and he had them in a high degree. There was, moreover, a fine peculiarity in his character, visible through all these, which distinguished his whole career, and in which, perhaps, consisted the secret of his success. Mr. Kaye defines this peculiarity by the word *straightforwardness*. In some respects the word is well chosen. Candour, absence of mystification, straightforwardness, is a marked characteristic of all that we hear of Metcalf, and of all that came from his pen. He tells plainly the state of the case when he is sending information about any matter; he never conceals his differences of sentiment in writing to a friend; he criticises his superiors freely; and if there is any misunderstanding with his superiors, he persists in clearing it up. There is also a strong sense of what is due to himself, and a prompt sensitiveness to indignity and injustice. Were we, however, to specify what seems to us to have been Metcalf's finest and most effective peculiarity, as a public man, we should say it was his firm snavity of temper. From first to last we see in him a decided opinionativeness, and from first to last we see this conjoined with extreme sweetness and gentleness. To this gentle opinionativeness he owed much of his success. If he had an opinion—and he had one on almost every subject that came in his way, thus proving that he was fitted for practical life—he adhered to it firmly; but he never lost his temper in maintaining it. "He never cavilled about a trifle," was Lord William Bentinck's character of him, "and he never yielded to me on a point of importance." This it was that made him so excellent as a negotiator, and that fitted him so peculiarly for the various conjunctures in which he was tried. His triumphs were not so much those of great faculty, as of a sound firm head, and a sweet temper. People respected him, and were drawn to him affectionately, even when he was standing out against them and keeping to his point. In this respect he is a man to be studied by all those who have faith in the maxim

of *suaviter in modo, fortiter in re*. Unopinionative people have no business to engage in active life, for active life consists in impressing on society what one has no doubt about; but suavity in the mode of carrying out one's opinions is more rare than the opposite. Metcalfe was great in this, and hence he saved Canada.

The last remark suggested to us by Metcalfe's life may be summed up in the phrase—we will coin a Benthamism for the sake of brevity—transferability of official aptitude. Metcalfe served thirty-seven years in India; thence he was removed to Jamaica, and called upon to act in a society and amid circumstances very unlike those of India; and, finally, with the tinge of two torrid climes on his cheek, he appeared in furs amid the snows of Canada. Here was a regular gradation of difficulty, and yet, in Mr. Macaulay's words, he was found equal to all the conjunctures in which he was tried. The lesson is that, differ as communities and societies may in race, customs, religion, and all other such respects, there is yet a certain general knack, or art of governing men, which may be carried hither and thither like a portmanteau. Of this transferability of administrative talent, our Colonial history has furnished various examples, but none more striking than Lord Metcalfe.

- ART VI.—1. *Medical Notes and Reflections*. By Sir HENRY HOLLAND, Bart., M.D., F.R.S., &c., Fellow of the Royal College of Physicians, Physician-Extraordinary to the Queen, and Physician in Ordinary to His Royal Highness Prince Albert. London, 1840. 8vo. Pp. 638.
2. *Chapters on Mental Physiology*. By Sir HENRY HOLLAND, Bart., M.D., F.R.S., &c, founded chiefly on Chapters contained in "Medical Notes and Reflections," by the same Author. London, 1852. Pp. 302.
3. *Researches on Magnetism, Electricity, Heat, Light, Crystallization, and Chemical Attraction, in their Relations to the Vital Force*. By KARL BARON VON REICHENBACH, Ph. D. Translated and edited, at the express desire of the Author. By WILLIAM GREGORY, M.D., Professor of Chemistry in the University of Edinburgh. Parts 1 and 2. 8vo. London, 1850. Pp. 456.
4. *Physico-Physiological Researches on the Dynamics of Magnetism, Electricity, Heat, Light, Crystallization, and Chemistry, in their relation to the Vital Force*. By BARON CHARLES VON REICHENBACH. The Complete Work, with Preface, by JOHN ASHBURNER, M.D. London, 1851. 8vo. Pp. 610.
5. *Isis Revelata*. By J. C. COLQUHOUN, Esq. 2 vols. 8vo. Edinburgh, 1844.
6. *An History of Magic, Witchcraft, and Animal Magnetism*. By J. C. COLQUHOUN, Esq. 2 vols. 8vo. London, 1851.
7. *Lectures illustrative of Certain Local Nervous Affections*. By SIR BENJAMIN C. BRODIE, Bart., F.R.S. 8vo. London, 1837. Pp. 88.
8. *Hypnotic Therapeutics, illustrated by Cases, with an Appendix on Table Moving and Spirit Rapping*. By JAMES BRAID, M.R.C.S. London, 1853. Pp. 44.
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THERE is no department of knowledge in which so little progress has been made as in that of Mental Philosophy. The human mind has been studied as if it were independent of the body, and, generally speaking, by philosophers who possessed a comparatively small share of physical knowledge. No attempt, indeed, has been made to examine its phenomena by the light of experiment and observation, or to analyze them in their abnormal phases, when modified by external influences, or by the various

conditions of that complex and mysterious organization on which life and its functions depend. The science of mind, therefore, if it can be called a science, cannot boast of many indisputable truths, or many admitted laws. Without data, without axioms, without definitions, it proposes problems which it cannot solve; it draws corollaries from assertions which are not proved; and however ingenious have been its cultivators, their ingenuity has been more displayed in overturning the speculations of their predecessors than in establishing their own. Nor is this a result which ought to surprise us. Viewed as material by one inquirer, as spiritual by another, and by others as mysteriously compounded of both, the human mind escapes from the cognizance of sense and reason, and lies, a waste field with a northern exposure, upon which every passing speculator casts his mental tares, choking any of the good seed that may have sprung up towards maturity.

During the last century, however, the attention of physicians and physiologists has been directed to new classes of mental phenomena, which have excited much difference of opinion, and in the inquiries and discussions to which these phenomena have given rise, a new light has been thrown on the mysterious agencies from which they spring. The high pretensions of mesmerism, in which blindfold man fancies he sees the distant in space, and the remote in time; and those of phrenology, in which he scans what is spiritual through screens of bone and folds of epidermis, have been reduced to their proper level, and the few truths which they really embrace have taken their place among the sober results of inductive science. But no sooner had those mental errors been exploded, and the moral atmosphere cleansed from their noxious exhalations, than new heresies arose, more fanatical in their character, though fortunately less powerful in their grasp—heresies resting, in some cases, on slender foundations of truth, but in others on the morbid suggestions of diseased and distempered imaginations. We allude, as our readers will see, to phreno-mesmerism, electro-biology, table-turning, spirit-rapping, and all those influences yet unnamed, which are supposed to reside in the human body, and to control, not only the corporeal and mental condition of man, but to communicate to dead matter new qualities and powers.

When these different heresies were occupying the public mind, and raging with epidemic fury among all ranks of society, but most virulently among the educated classes, it was in vain to appeal to experience or to reason. The scepticism of the scientific inquirer was met by an array of facts which he had scarcely the courage to question. The child appealed to the never questioned testimony of a father, the pupil to that of his teacher,

the citizen to that of his pastor, the presbyter to his diocesan; and a mass of evidence was thus collected which but few philosophers were able to analyze. When the scientific sceptic did venture to doubt, he was himself summoned within the magic circle, and often found himself under the same influence, and a witness to the same results by which his brother conjurors were misled. Under such circumstances, it was in vain to resist an epidemic, for which self-exhaustion was the only remedy. It accordingly assumed a variety of forms, each more wild and towering than its predecessor. Without a medium to carry it, it rushed into the unseen world, summoning the dead from their graves,—the saints from their place of bliss,—the wicked from their penal settlement,—and the very God of nature from his throne. The fury of the moral tornado was thus quickly expended. Man—credulous and worshipping man—stood aghast on the threshold upon which he had been thrown, and, with opened eye, saw scattered around him the few fragments of truth upon which he had erected his Titanic superstructures.

In venturing to describe to our readers these various forms of the mysterious and supernatural, and attempting to inquire into their true nature and origin, the writer of this article feels that he has, at least, one qualification which may fit him for the task. Accustomed to researches of a rigorous kind;—sufficiently credulous, too, to admit the truth of well authenticated phenomena which he cannot understand, or reconcile with existing laws;—and believing that there are mysterious influences in the spiritual and material world which have not yet been explained, he willingly studied the various mysteries of which he is now to treat, discussed them with their most devoted adherents, and took such pains to inquire into the accuracy of their results, that he has been ranked among the most credulous of their supporters.

At a very early stage of the inquiry, it was obvious that some of the most incredible results—some of those, for example, which were obtained in electro-biology, were real phenomena, though ascribed to influences that had no existence; and notwithstanding that these phenomena were stoutly denied and denounced as tricks by physiologists and sceptics of all degrees, yet we have now the satisfaction of seeing them adopted by the most eminent and philosophical of our physicians. Sir Henry Holland has, particularly distinguished himself in the investigation of that branch of mental physiology which treats of the influence of the mind over the body, and in the two interesting volumes which we have placed at the head of our list of books, he has presented us with the valuable results at which he has arrived. Instructed in modern science, in all its branches, he has success-

fully employed the lights which it bears in the elucidation of mental phenomena, and has convinced us how much might have been achieved by the metaphysician, had he been guided in his inquiries by the never flickering torch of physical knowledge. But it is not merely from their bearing on the exciting questions of the day that the writings of Sir Henry Holland possess a peculiar interest. They are replete with lessons of high instruction to the medical profession, so high, indeed, that we can scarcely consider a physician entitled to practise his profession, who has not drunk deeply in the lessons of wisdom and experience which these volumes contain. Free from the technical discussions which can be relished only by the practitioner, the general reader will find in the "Medical Notes and Reflexions" of our author, information not only interesting but useful to him, either in reference to his own health, or to that of others of which he is the guardian. It is only, however, to that portion which relates to mental philosophy, that we can at present call the attention of our readers, and we shall find it of peculiar value in reference to the different subjects of which we have to treat.

In the discussion of questions of a medical nature, we must not expect that kind of evidence which we are accustomed to demand in questions of law or of physical science. The principle of life, and the action of the mind on the bodily organs, introduce new and complex relations, which expose all our reasonings to new sources of error. Sir Henry Holland justly states, in his preliminary chapter on this interesting subject, "that it is the want of a right understanding of medical evidence which makes the mass of mankind so prone to be deceived by impostors of every kind; whether it be the idle fashion as to particular remedies, or the worse, because wider, deception of some system professing to have attained at once what the most learned and acute observers have laboured after for ages in vain;" and he subsequently mentions the important fact, "that during the last twenty years, omitting all lesser instances, he has known the rise and decline of five or six fashions in medical doctrine or treatment; some of them affecting the name of systems, and all deriving too much support from credulity, or other causes, even among medical men themselves." The same difficulties which are thus inherent in all medical questions, are increased tenfold in the examination of those sciences falsely so called, which are treated in the works under our consideration. If medical men, highly educated, and occupying a distinguished social position, have been seduced from the sober paths of their profession into new and ephemeral systems which fashion sanctions and imposture sustains, we need not wonder at the temporary success of wilder theories where the illiterate and the

inexperienced are the adepts, and where other conjurors, male and female, tamper with the laws of the moral and material universe, and lay claim to influences and powers which the Almighty has never, but in his Word, granted to the wisest and the best of his creatures.

One of the most important topics discussed by Sir Henry Holland, and one which we shall find very applicable in the future, is the influence of mental attention, or of the direction of consciousness, either voluntarily or involuntarily, on our bodily organs. The effect of concentrated attention in increasing the intensity of our ordinary sensations, has been recently studied by various physiologists, but its influence over our bodily organs had only been casually noticed. Independent of the effect of mental emotion upon the heart and the organs of circulation and respiration, the simple centering of the consciousness upon that organ often quickens and disturbs its action. It will give, as Sir Henry Holland observes, "a local sense of arterial pulsation where not previously felt; and excite or augment those singing and rushing noises in the ears which probably depend on the circulation through the capillary vessels." In the acts of yawning, coughing, and sneezing, the same influence is distinctly exhibited. In like manner a sense of weight, oppression, uneasiness, and nausea, is produced in the stomach; and the organs of deglutition and articulation are similarly affected, as is shewn in the occasional difficulty of swallowing, and in the act of stammering. To the same principle Sir Henry ascribes "some of the alleged facts in Homœopathy, such as the long train of symptoms, sometimes amounting to hundreds, which are catalogued as proceeding from infinitesimally small quantities and substances inert or insignificant in other manner of use." The local sensations for which the patient thus seeks "generate one another, and are often excited by the mere expectation of their occurrence." In illustration of the same principle, Sir Henry refers to those changes produced in what are called the ocular spectra of luminous objects, when the eyes are closed. These changes often take place involuntarily, and it is the opinion of some writers of authority that these coloured spectra pass from a positive to a negative state till they gradually fade away. The case which Sir Henry Holland mentions, as observed by himself, of a picture of the window wholly disappearing for a short time, and being recalled for a short time, though less vividly, by the attention being directed to it, is one which in many thousand trials we have never seen, and we are disposed to think that it was the more persistent negative or reverse image which he saw. When the light is very strong so as powerfully to affect the eye, the positive or direct image of the object is instantly recalled, and our author might

have advantageously referred to the remarkable results obtained by Sir Isaac Newton and others upon this interesting subject. Having looked upon the sun in a looking-glass, and studied the coloured spectra which were thus produced, Sir Isaac "brought his eyes to such a pass that he could look upon no large object without seeing the sun before him, so that he durst neither write nor read;" but to recover the use of his eyes, he shut himself up in a dark chamber for three days together, and used all means to *divert* his imagination from the sun. "For if I thought upon him," he says, "I presently saw his picture though I was in the dark, but by keeping in the dark, and employing my mind upon other things, I began in three or four days to have some use of my eyes again; and by forbearing to look upon bright objects, recovered them pretty well, though not so well but that *for some months after*, the spectrum of the sun began to return as often as I began to meditate upon the phenomena, even though I lay in bed at midnight with my curtains drawn. But now I have been very well *for many years*, though I am apt to think if I durst venture my eyes I could still make the phantasm return *by the power of my fancy*."*

The influence of concentrated attention upon our muscular structure or action, is a branch of the subject of peculiar interest. There can be no doubt that it gives rise to new and specific sensations, "communicates movement to objects with which the muscles are in contact, and even unconsciously renders such movement conformable in direction to the expectation entertained." Hence we are led to the explanation of the divining rod, of the movements in the magnetoscope, and of various phenomena exhibited in the mesmeric or electro-biological state, and in those singular conditions of the body in which the organs of sensation are more strongly impressed by the internal operations of the mind, than by the direct action of external objects.

From this very interesting subject Sir Henry Holland proceeds to consider the mental functions and phenomena in their continuity, or as a series of states passing continually into one another without those lines of arbitrary demarcation which language has imposed upon them. In illustrating this principle by examples from each class of familiar mental phenomena, our author requests the reader to place himself in the crowded street of a city. Objects of sight are painted upon his retina. The tympanum of his ear vibrates with various sounds: odours ever varying, excite his olfactory nerves, and he is every moment jostled by the passer by. One only of each of these sensations is dis-

* *Memoirs of the Life and Writings of Sir Isaac Newton*, vol. i. pp. 236-239, now in the press.

tingly present to his mind. In order to prove this, let him try to attend *at once* to the figures of *two* persons before him; or to *two* distinct sounds, and he will find it impossible. Or if he "passes suddenly into a train of inward thought, all the external objects then crowded around *utterly disappear*. . . . Every sense sleeps while the mind is thus awake and active within itself." An example more familiar in sedentary life is equally illustrative of this important principle. You are engaged in abstract study—the vessel of the mind is moored to some exciting idea. The clock strikes, and you do not hear it. A friend enters, and you do not see him. He addresses you, and you do not hear him. He tries to rouse you, but he fails; and till the mental anchor is weighed and the vessel floats freely on the ocean of thought, you are unable to hold converse with your friend. In these cases we are not satisfied that the external objects utterly disappear. The auditory nerve, we are persuaded, vibrates to the sound of the clock, and the unseen friend is painted on the retina. The sound is heard, and the image is seen, but no attention is paid to either. It is only, we conceive, when the same nervous filaments are called upon to carry simultaneously to the brain two different sensations, that there is an entire disappearance of one of the external objects.

That the mind possesses the power, by volition, of regulating the succession of its states, or of selecting and arranging the objects of its perception, or of its thoughts, has been satisfactorily shewn by Sir Henry Holland. This power he illustrates by the fact, that when we look at the pattern of a paper-hanging or of a carpet regularly figured, the eye will, sometimes, by separate acts of attention, perceive in succession different patterns, each pattern being made up of different lines. We have often made this experiment, but we never saw the fact produced by lines. It succeeded with us only when the successive forms were of different colours. When the colours of a carpet, for example, were *red* and *green*, the red pattern would alone be visible, and then the green alone. This experiment, we believe, will succeed only when the mind is otherwise occupied than with the carpet, and the attention casually directed to it. The separation of the patterns is very momentary, owing to the inability of the eye to maintain the vision of objects not seen along its axis.

Having thus shewn, that each object or act of consciousness excludes momentarily all others, however closely they may precede or follow it, Sir Henry proceeds to point out the changes which disease often produces in the succession of these acts of the mind. In some cases, of course, a considerable time, sometimes a minute, elapses "between a question asked at a patient and his reply." In extreme old age there is a similar slowness

in mental operations, and frequently, as in disease, they are attended with much difficulty;—"as if a certain time for concentration of nervous power" were necessary before the intended act could be begun. This condition of the mind has been referred to by Locke, when he remarks, that there is a kind of restiveness in almost every one's mind, sometimes without perceiving the cause, boggling and standing still, and not able to get a step forward.

These interesting views are well illustrated by our author, in two long and valuable chapters on Sleep, Dreaming, Insanity, which we would recommend to the careful perusal of our readers. We can only notice those points of the subject which have a more immediate connexion with the topics of which we are to treat. Bichat considers sleep as the sum of separate sleeps, each separate sense and mental faculty being at the same moment in different conditions, so that some may be deemed awake while others are wholly wrapt in sleep. Sir Henry Holland considers this opinion as "coming nearest to what may be termed a just theory of sleep," and, consequently, it may be described as consisting of a succession of states in constant variation,—“the variation consisting not only in the different degrees in which the same sense or faculty is submitted to it, but also in the different proportions in which these several powers are under its influence.” That the particular character of sleep, both when produced, and during its progress, depends on the manner in which it is produced, is a proposition well illustrated by our author, and exhibited in the various phenomena of Somnambulism, Mesmerism, Electro-biology, Trance, Catalepsy, &c. We are less acquainted with the mental condition of the somnambulist than of any of the patients in the other states which we have mentioned. When sleep is produced by the passes of the Mesmerist, or by concentrated attention upon an object, as in Electro-biology, it varies greatly, both in kind and degree, from that state of simple drowsiness under which the patient sees, and hears, and speaks, and walks, to that more complete condition in which he reclines helplessly upon his couch, and can scarcely be roused by the most exciting stimulants. In his curious and valuable experiments on *Hypnotism*, of which Electro-biology is a plagiarism, Dr. Braid has placed it beyond a doubt, that no influence whatever passes from the operator to the patient, a result of vast importance, as we shall see, in withdrawing this class of facts from the region of the supernatural.

The question has often been asked, why some dreams are distinctly recollected, and long preserved by memory, while others are but imperfectly, or not at all remembered. Sir Henry Holland mentions two probable causes, namely, that, in the case of

well-remembered dreams, the sleep is less complete in kind—that peculiar condition of brain less marked, upon which imperfection of memory, if not also the exclusion of sensation, appears to depend.” To this cause he is disposed to look for “the interpretation of the old notion of the *somnia vera* of approaching day. The physical state of sleep is then less perfect;—trains of thought suggested, follow more nearly the course of waking associations, and the memory retains them, while certain and more composed dreams are wholly lost to the mind.” Another cause of well-remembered dreams, mentioned by our author, is, “that the images and thoughts of some dreams are actually stronger and deeper in their impressions than those of others.” But though he regards this as an expression “too vague of use,” we are disposed to think, that it is the primary cause, while the first is only a secondary cause of well remembered dreams. Dreams are often deeply imprinted on the memory, from the degree of terror or pleasure which they inspired,—from the sagacity or absurdity which characterized them,—or from the visual form which they had created. But though dreams are frequently forgotten, they are often recollected at some distant time, and are then referred to some previous state of our being, in place of being regarded as the mere shades of former dreams, which some association, acting like the fluid which brings out a photographic picture, has distinctly restored. In the rest of this interesting chapter, Sir Henry treats of the causes which prevent, or favour, or produce sleep, and the reader will here find many important facts, both interesting and useful. The influence of the state of the atmosphere upon sleep and dreaming, which he describes, and which we believe was never before noticed, well deserves the attention of the meteorologist, as well as of the physician.

Before quitting the subject of sleep and dreams, we venture to suggest some views which deserve at least consideration. Regarding the mind as ever active, and incapable of sleeping, and its operations during sleep, as influenced by the condition of the organs, through which it acts, we do not require to maintain with Bichat, that “each separate sense or mental faculty” is at the same moment in different conditions, some being in different degrees awake, or in different degrees asleep. It is in the condition of the different parts of the brain, or intermedium by which the mind communicates with the organs of sense, that we must seek for the explanation of our dreams. The mind itself being incapable of fatigue is equally active, and equally vigorous during the night and during the day. We dream as much in the daytime as we do at night; but in consequence of the occupation of the mind and the influence of external objects, these dreams produce little or no impression, and were we to make the

attempt to seize and record them, we should find them more or less characterized by all the peculiarities which mark the visions of the night. Do we not now find ourselves daily in the east, looking at the embattled field, surveying the sanguinary plain, watching the crisis of the siege, witnessing the massacre of a friend, weeping at his funeral, or triumphing with him in his deed of glory? And are not these dreams of the very same nature as those of sleep, more ephemeral, indeed, in their duration, and more easily effaced by new and more direct impressions made upon the organs of sensation? But there is another class of dreams which occur previous to the approach of sleep, and when the mind is in full activity, and the body in a state of thorough repose. These twilight dreams, as we may call them, are brighter than those of the day, and less real than those of the night. The mental perceptions are more distinct, the creations of the imagination more brilliant, and every operation of the mind more perfect, when undisturbed by the influence of external objects.

As intimately connected with the topics which we are to discuss in this article, we must notice Sir Henry Holland's interesting chapter "on the brain as a double organ," in which he ably traces some of the probable or possible effects of this exact doubleness of parts upon the sensorial functions and the general economy of life. The division of this organ into two equal portions forms a singular contrast with the unity or individuality "of consciousness, or perception, volition, memory, thought, and passion, which characterizes the mind in its healthy state;" and yet this very unity is explained by the almost exact symmetry in the form and composition of each hemisphere, or the muscular relation of each to the organs of sense and voluntary motion on each side of the body, and in the structure of the nervous connexions which exist between them. To this doubleness of the nerves, and other organs of animal life, our author ascribes many disturbances in the mental faculties, and he considers it probable that some of them may depend on changes in the relation of parts to which a strict unity of action belongs in the healthy state. Paralysis of the organs of sense and voluntary motion affords numerous examples of the effects of this double structure; but even when the external organs are not paralyzed or defective, there is often a difference in the sensibility and voluntary power of the two sides of the body. Sir Henry knew a case where blisters, and all external stimulants, acted more powerfully on one side of the body than on another; and there are examples

* At this time the mind is peculiarly fitted for abstract investigations, and solving difficulties which would embarrass it at any other time. We would recommend it to the abstract philosopher to take his difficulties to bed with him.

both in man and the horse, of perspiration taking place only on one side of the body. These and other cases in which morbid actions and secretions occur more frequently in one side of the body than another, may, according to our author, be reasonably attributed "to variations in the two sides of the brain, or perhaps also to some diversity in that part of the system of the spinal cord most directly associated with the sensorial functions." One side of the brain has been found more affected with atrophy than the other, and what is very remarkable, Cruveilhier mentions a case in which one hemisphere of the brain was wholly reduced by atrophy to half the dimensions of the other, without any disturbance of the mental faculties. As the functions of memory and association depend on organized structure, and are partially subject to the intellect and will, Sir Henry is of opinion that they must be affected in various ways, by dissimilar action in the two hemispheres of the brain. From these considerations he is led to the opinion, that many of the forms of mental derangement are due to the incongruous action of the double structure. When lesion or active disease affects one side of the brain only, the unity of action of the two sides may be disturbed; but even where there is neither disease, nor injury of structure, there may be a sufficient inequality in the two actions to derange the trains of thought in a variety of ways. In certain states of mental derangement, and in some allied cases of hysteria, our author has observed the operation, as it were, of two minds, the one correcting the aberrations of the other. In some cases there seemed to be a double series of sensations; but the incongruity is observed chiefly in the moral feelings. "We have often had occasion," says Sir Henry, "to witness acts of personal violence committed by those who have, at the very time, a keen sense of the wrong, and remorse in committing it; and revolting language used by persons whose natural purity of taste and feeling is shewn in the horror they feel and express of the sort of compulsion under which they are labouring." This curious fact he is disposed to explain "by the presence to the mind of real and unreal objects of sense, each successively the subject of belief, the phenomenon itself possibly depending on the doubleness of the brain and of the parts ministering to perception." This explanation, however, he does not think satisfactory "when complete trains of thought are perverted and deranged, while others are preserved in sufficiently natural course to become a sort of watch upon the former," and the only conjecture which he thinks applicable in such instances is, that "the two states of mind are never exactly coincident in time," the mind passing with inconceivable rapidity from one train of thought or feeling to another. At this point of view he refers the cases in question to what has

been called *double consciousness*, "where the mind passes by alternation from one state to another, each having the perception of external impressions, and appropriate trains of thought, but not linked together by the ordinary gradations, or by mutual memory." Sir Henry regards the relations of these two states (of which he has seen one or two singular examples) to the phenomena of sleep, of somnambulism, reverie, and insanity, as abounding in conclusions, of the deepest interest to every part of the mental history of man.

Having thus presented to the reader a brief abstract of those portions of Sir Henry Holland's work which will assist us in explaining the various abnormal phenomena which we are about to consider, we shall add at greater length some other views auxiliary to his, and calculated we think to throw additional light on this obscure portion of mental philosophy.

In every treatise on intellectual phenomena, our organs of sensation are supposed to have fulfilled their highest purpose when they have conveyed to the brain the impressions which they receive from external objects. The ideas which thus enter the storehouse of the mind are reproduced in the acts of conception, memory, and imagination; but by what means they are reproduced, through what channel they are presented to us, and in what position and direction they appear in absolute space, are questions the solution of which has not been attempted. According to the views which we have been led to form, the organs of sense are the channels by which these ideas are reproduced;—the retina and the other nervous expansions are the tablets to which the mind conveys them through the appropriate nerves, and these reverse impressions give to the ideas of the mind the same external locality as that of the objects from whose agency they were originally derived. The membranes of sensation, therefore, are the mystic boundary between the worlds of matter and of mind. They receive the impressions of external nature, and convey them to the mind, and by a similar process they take back and give an external existence to those ideas which the mind desires to be reproduced for intellectual and social purposes. The nervous expansions, therefore, in the organs of sense, are the seats of two kinds of impressions, the one *direct* and proceeding from external objects, and the other *reverse* and proceeding from acts of the will.

In the healthy condition of the mind and body, when the organs of sensation are the faithful interpreters of the external world, the relative intensity of the two classes of impressions is nicely adjusted. The ideas of memory and imagination are feeble compared with those of sensation, and, in reference to visible objects, both classes of impressions are painted on the

retina with different degrees of vivacity. When in the midst of society, or surrounded with the beauties of the natural world, we summon up the scenes of former years, we become for a moment insensible to external objects. The mental picture, as transient as it is feeble, soon disappears, and the mind is again under the dominion of surrounding impressions.

The affairs of life could not be carried on were the memory to intrude bright representations of the past into the domestic scene, or scatter them over the external landscape; and our powers of reason and of judgment could not be exercised, if the dazzling phantoms of the imagination were to be mixed up with the sober realities of our existence. The two opposite impressions, indeed, could not be contemporaneous: The same nervous filament which is carrying the forms of memory from the sensorium to the retina, could not at the same time be carrying back the impression of external objects from the retina to the brain. The mind cannot perform two different functions at the same instant, and its occupation with one of two classes of impressions necessarily produces the extinction of the other; but so rapid is the exercise of mental power, that the alternate appearance and disappearance of the two contending perceptions is no more recognised than the successive observations of external objects during the twinkling of the eye. Hence we have a sort of physical explanation of *double consciousness* already referred to. When in electro-biology the operator tells the patient that there is a horse standing before him in a drawing-room, the horse is distinctly seen, while the pictures behind it on the wall are invisible; but when the mental picture of the horse on the retina disappears, the pictures again become visible.

But though in ordinary minds the relative intensities of direct and inverse impressions on the retina are nicely adjusted to the purposes of life, yet there are various causes which disturb that adjustment, and give predominance even to the weaker influence. In darkness and solitude, when the external world is almost closed to the senses, the workings even of ordinary minds are depicted in more vivid hues, and in the state between waking and sleeping, the slumbering senses are often roused by the glare of the pictures which flash upon them from within.

These views will be better understood if we consider in detail those classes of phenomena which the mind exhibits, when it is under the influence of causes which weaken the impressions of external objects, and give a preponderance to the ideas of memory and imagination. These phenomena are exhibited in various states of the mind,—

When it is under the influence of some predominating excitement of grief or of joy.

2. When it is in a state of reverie or abstraction.

3. When it is in an intermediate state between sleeping and waking.

4. When it is in the act of dreaming, and in the condition of somnambulism.

5. When from some derangement in the vital functions, it is subject to spectral illusions ; or,

6. When it is liable to occasional insanity, or in a state of hopeless derangement.

1. When the mind is raised above the ordinary tenor of its emotions by any overwhelming excitement, all its operations share in the general elevation ; and all its impressions rise in intensity. Objects that used to excite the highest interest and fix the deepest attention, cease to exert their wonted influence, while the new idea with which the mind is conversant, wields over it an uncontrolled dominion. Excluding all other ideas by its vivacity and persistency, it acquires power by the very exercise of it, and those nerves which have been thus habituated to carry strong and vivid perceptions, will often resist the most anxious efforts to make them vibrate to more sober impulses. If sudden prosperity be the cause which excites us, the gilded visions of the future throw the past and the present into the shade, and the new objects which are to administer to our happiness are presented to our imagination in distinct outline and vivid colours. They stand out from the back ground of ordinary life as things already realized,—as objects which the sight actually sees, and the touch actually feels.

If affliction, on the contrary, lays its cold hand on the heart, a leaden hue is thrown over the brightest scenes of nature ; the object which suffers, or the object which is removed, is ever present, to fill the anticipated or the real void. It is seen, it is heard, it is felt ; its mental delineation is carried back to the past : it is shed over the present : it is wafted to the future ; and in all the impressions which the mind thus derives from the affections, the objects which it has summoned to our view are depicted in all the reality of life. Under the circumstances, however, which we have been considering, the mind is not in a condition to recognise the physical character of its pictures.

2. When the mind is in a state of *reverie* or *abstraction* it is often so completely engrossed with the objects of its contemplation, as to be insensible to all surrounding impressions. The victim of mental abstraction neither sees, nor hears, nor feels ; and he may even be shaken without losing hold of the train of thought on which his faculties are so intensely concentrated. Light falls upon his eye, sound vibrates through his ears, and he is often unable to recall their impressions after his mind

has been unbent. During this trance of reason the objects which have fixed his attention have a reality and a presence with which he is unable to invest them on ordinary occasions, but still they have, not that physical character which may be recognised in other states of the mind.

3. In the intermediate state *between sleeping and waking* the mind is in the most favourable condition for examining the nature of its representations. In the darkness and stillness of night the reasoning faculties are capable of developing their highest energies; and problems may then be solved and difficulties surmounted which, at any other period of the day, would be impregnable. A very striking example of this is displayed in the history of the celebrated engineer, James Brindley, who was so truly illiterate, that he is said to have been ~~unable~~ to read or write. By his unrivalled powers of abstraction and memory, he drew his plans in his mind, with such vividness, that he often executed them without committing them to paper. When he was engaged in any very difficult and complex undertaking, he was in the habit of retiring to bed, where he often remained for two or three days, till he had thoroughly completed his design. So singular, indeed, was the structure of his mind, that the spectacle of a play, in London, disturbed to such a degree the balance of its mechanism, that he could not for some time resume his usual pursuits.

At the time which precedes or follows sleep the mind is frequently in a state approximating to that of dreaming. When perfectly conscious of being awake, forms and shapes of various character often appear in the most vivid outline; and, in some cases, a dream has just commenced, while, in others, it has not terminated, when we are in the full possession of our senses. In such cases, we have made many experiments on the pictures thus presented to us, and we have always been led to the conclusion that they are formed on the retina. They follow the motions of the retina, like all impressions on that membrane; and we have sometimes seen them in the morning projected on the bed-curtains and on the walls, and co-existing with the impressions of external objects. It requires some practice to make such experiments, but we are confident that it is in the power of any person sufficiently interested in the pursuit, to obtain the most conclusive evidence that the mental pictures presented to us under the circumstances above stated, are actual images or impressions on the retina, conveyed to it by the agency of the mind, and seen externally by the law of visible direction.

4. In the acts of *dreaming* and *somnambulism*, when the external organs are either asleep or inactive, the creations of the mind acquire the same brightness, and inspire the same conviction.

tion of reality, as if the objects which they represented were immediately before us. We see the forms, the colours, the movements of organic and inorganic life;—we enjoy the pleasures of social intercourse, and our powers of reasoning, and even of composition, are often judiciously exercised. The impressions thus made upon the organs of sense have often such an overpowering influence that they are recollected in almost their original brightness, after the lapse of many years, and even at the end of a long life.

The phenomena of dreaming have been supposed to be the consequence of disturbed sleep, and to be exhibited only during waking and sleeping, but no person who has studied the subject can entertain such an opinion. Dreams are the operation of the immaterial principle, which never slumbers, and they are recollected only when some powerful association recalls them, or when they shake by their reality and power the frail tenement of their victim. On some occasions, indeed, the creations of the mind are so exciting, and so closely related to our strongest affections, that the frame which they disturb will start from the most deathlike repose to enjoy the imagined Elysium, or to avoid the Scylla and Charybdis of the fancy.

These operations of the mind are carried on as vigorously and as extensively during the day. During the intervals, or in the midst even, of exciting pursuits, the mind is busy with its creations, and it is only because they are effaced by stronger impressions that they are not observed and recollected, like those which take place during the inaction of the body.

It is impossible for any person to study this class of phenomena without arriving at the conclusion that the pictures which we contemplate in dreaming are really impressions on the retina, which receive an external locality, like all analogous affections of that organ, in virtue of the law of *visible direction*.

5. The next class of phenomena in which the operations of the mind are exhibited physically are those of *spectral illusions*.

This subject, which has only recently attracted the attention of philosophers, is one of deep interest; and we regret that our limits will not permit us to give more than one or two examples of it. These spectral apparitions are neither the result of fear, nor of a disordered intellect. They present themselves even at mid-day to persons of sound minds and well-regulated imaginations, and they shew, in a very striking manner, the power which even a slightly morbid condition of the body exercises over the mind. One of the earliest and best described cases of spectral illusions was that of Nicolai, a bookseller of Berlin, which occurred in 1791, and has been described in several English works. Mrs. Hamilton, Coleridge, and Sir Robert Liston, were subject to the

same influence; but the following two cases of a young lady of high acquirements, whom we personally knew, from whom we obtained the particulars, and who at a much later period of life became the patient of Sir Henry Holland,* possess a peculiar interest. In one of these cases, the spectral apparition presented itself to this lady in her own drawing-room, in the midst of a circle of her friends. On the 11th of October 1830, the figure of a deceased friend appeared to be moving towards her from the window at the farther end of the room. It approached the fire-place, and sat down in the chair opposite to that which the lady herself occupied. The prevailing sentiment in her mind was a fear that the company might observe her staring at vacancy in the way she was conscious of doing, and might suppose her to be deranged. Under this fear, and recollecting a story of a similar effect in Sir Walter Scott's work on Demonology, which she had lately read, she summoned up resolution to seat herself in the chair occupied by the figure. The apparition remained perfectly distinct till she sat down in its lap, when it disappeared. On the 26th of the same month, about two o'clock, when the lady was sitting near the window beside her husband, he heard her exclaim, "What have I seen!" and upon looking at her, he perceived a strange expression in her eyes and countenance. A carriage and four had appeared to her to be driving up the avenue to the house: As it approached she felt inclined to go up stairs to prepare to receive company; but, as if spell-bound, she felt herself unable to speak or to move. When the carriage arrived within a few yards of the window, she saw the figures of the postilions, and of the persons inside, take the ghastly appearance of skeletons, and other hideous figures. The whole scene then vanished, and she uttered the exclamation above-mentioned.

6. The last state of mind, in which its own ideas predominate over external impressions, is that in which it is subject to occasional insanity, or when it is in a state of hopeless derangement.

In the states of the mind which we have already considered, the spectral phantasms which present themselves to the patient, though clothed with all the attributes of real objects, are yet merely illusions of sense, not illusions of reason. Though the coercive power of the will cannot exorcise them, it yet holds a firm rein over the intellectual and moral powers. When the mind, however, is under the influence of derangement, the equilibrium of its faculties is more or less destroyed. The visions which haunt it are viewed as real existences. The will has lost all its control over the other faculties; and with its intellectual

* *Chapters on Mental Physiology*, p. 116.

rudder unshipped, the frail bark of human reason, obeying every frenzied impulse, founders amid the storms and eddies of its own creation. In every case of mental alienation, the ideas which successively rush through the mind are embodied in external phenomena which the senses take cognizance of, as if they were real existences, and which are therefore necessarily the result of reverse impressions made upon the nerves of sensation.

Having thus described the leading facts respecting these various conditions of the mind in which its own ideas and creations predominate over external impressions, we shall now proceed to make some general observations which these facts necessarily suggest.

When two different objects, or classes of objects, solicit our notice, the one in which we feel the deepest interest will fix our attention, whether they be objects of perception or reflexion, or whether they belong the one to one class, and the other to another. Persons unaccustomed to carry on mental operations are entirely under the dominion of external impressions, while those who have surrendered their minds to abstract research, or who live in the regions of fancy, are more under the influence of mental agencies. Between these two classes of persons is a third, who, though trained to study, are yet so conversant with the pursuits of active life, that the operations of the mind, and the influences of external objects, are kept in due subordination to each other.

As it is by an act of the will that the mind directs the organs of sensation to the accurate examination of objects, in order to obtain a perfect perception of their qualities; so it is by a similar act that the mind directs its attention to the ideas thus furnished, and maintains its influence over its trains of associations and reflexions. The co-existence and proper equilibrium of these two acts of the will—of what we may call its directive power over the organs of sense, and of its coercive power over trains of thought, may be regarded as the attribute of a sound and powerful mind.

This balance of the powers of volition is seldom the accompaniment of a lively and active fancy;—and in persons whose imagination is highly sensitive and morbid, the mind exercises a very feeble coercive power over the train of its associations. Ideas, consequently of an exciting kind, which the peculiar temperament of the individual has been accustomed to cherish, intrude themselves spontaneously among his thoughts, and though the links which connect them may be wanting, or perhaps unrecognised, yet the new current, bearing the floating wrecks of fancy and of reason, sweeps in full spring-tide over

the mind, obliterating almost the perceptions of surrounding objects, and carrying its surges into the very bays and inlets of the senses.

The next point which demands our attention is the locality of the illusion, or, to speak more correctly, the place of its production. That the eye is the seat of the visual illusions, and the ear of the auricular ones, cannot be doubted. Spectres which are seen, and which have a position in front of the eye, must surely be seen by the exercise of ocular functions,—that is, they must be impressed on the retina. Spectres which are effaced by closing the eyelids, must owe their visibility to a function of the eye, which is affected by the closing of the eyelids; and spectres which follow the eyeball in its ascending and descending movements, and which accompany the patient into another room, must surely be impressed upon that part of the organ of vision which can alone receive images, and which alone has the power of giving them an external existence.

The conclusion to which we are led by these facts and observations is, that in spectral illusions, at least, if not also in reverie, dreaming, and particular species of insanity, the mind actually transfers its ideas and creations to the nervous expansions of the organs of sensation; and hence it follows, that there must be a power of the mind, whether voluntary or involuntary, by which this act of transference commences, and also a physical mechanism by which it is completed.

This being admitted, we shall now consider how far the same conclusion is true of the ideas of a well-ordered and sound mind in the healthy exercise of its functions.

Memory is the leading faculty of the mind, upon which all our mental operations depend. It has been justly said, though in different words, that if the most gifted being were to spend a thousand years in the observation and enjoyment of the natural and moral world,—in tasting all its luxuries, in admiring all its wonders, in listening to all its music, and in imbibing all its wisdom,—he would, without the faculty of memory, be but like a sheet of white paper that had been carried round the world to receive through a camera obscura its most enchanting views, or like the walls of Westminster Abbey after the commemoration of Handel. Possessing, however, this cardinal faculty, the gifted traveller is able to record, or to remember, all his perceptions, and to draw them forth at pleasure, from their secure deposit, as materials for the other operations of his mind.

Oral and written language, the one appealing to the ear, and the other to the eye, minister most powerfully to this faculty. Visible perceptions may be recollected by the articulate sounds of the terms which express them, and the term itself will be

brought to mind when the object which it represents appears; and in like manner we may recollect sentences by means of our recollected visible perception of their local position in the page upon which they are placed. Our illustrious countryman, Sir James Mackintosh, whose memory was of the most extraordinary kind, was able to repeat *verbatim*, at the close of his life, whole pages of books which he had read when at college; and in doing this he always saw before his eyes the very page of the edition from which he quoted, and therefore the locality of the paragraphs and words of the quotation.

The eye and the ear are, therefore, the principal instruments by which the acts of the memory are performed, and the power of this faculty in any individual is proportioned to the distinctness and force of the impression, and also to the frequency of its repetition; that is, to the precision and force with which the nerve conveys the sensation to the brain; and to the number of times that it has conveyed the very same sensation. This mode of describing the act by which the mind receives the ideas of memory might, without any other evidence, suggest the theory, that memory reproduces these ideas by sending them back through the same nervous filaments which conveyed them to the brain; that is, by a reverse process, commencing at the perceptive extremity, and terminating at the sentient extremity of the nerve. But we shall submit this proposition to other tests of a more rigorous kind.

When a portrait painter sits down to delineate the likeness of an absent friend, he copies from a picture which has been fixed in his mind by one or more perceptions. This picture he is said to see in his mind's eye. According to the theory above mentioned, it is seen in his body's eye. Now it is just possible that both these statements may, to a certain extent, be true. If the mind's eye represents objects in a fixed direction, that direction may be coincident with the direction given by the eye itself, and yet the optic nerve and the retina may be in no respect concerned in giving the mental phantasm this special locality. But as the direction of the eye, even when the brain is fixed, may occupy every possible radius of a hemisphere, it would be a strange supposition to make, that the mind's eye could take all these various directions, in subordination to the motions of the eyeball, without a physical intermedium. Those who object to the theory in question, therefore, must maintain, that the pictures of the mind have a *quaquaversus* or ubiquitous direction; that is, that the mind can place them in any direction it pleases, independent of the motion of the eyeball. But if the mind has such a power, it certainly does not use it. No mental picture was ever seen above the head, or behind the back, or beneath

the feet. The only refuge, indeed, for those with whom we are arguing, is to maintain, that the mental pictures have no locality, and the eye no concern whatever either in their production or in their contemplation. This opinion, however, may be put to the test of observation, for if we close our eyes, and summon up a panoramic scene, containing various striking objects lying in different directions, and at distances from each other, rendered familiar to us by frequent observation, we shall find that the eyeballs actually move over the mental landscape, in order to take cognizance of its parts, exactly as it would do over the real scenery.

But, to draw the argument still closer, let us take the case of a very vivid impression upon the retina, such as that described by Sir Isaac Newton, where the recollected image of the sun brought back a real spectrum, and where every effort was required to prevent its frequent return. The spectrum, too, was reproduced on the retina of the eye on which the solar light did not fall, and the part of both retinas, where the image of the sun was revived at midnight, and in absolute darkness, was the part in one eye on which the sun's image actually fell, and the corresponding part of the other eye.

It seems difficult to view this experiment in any other light than as an *experimentum crucis*, especially when coupled with the results to which we were led by the phenomena of spectral illusions. But independently of this character, it is calculated to throw some light on the manner in which objects are fixed in the memory, and reproduced by the nerves of sensation. We learn, in short, from Sir Isaac Newton's experiment, that a physical impression on the retina may be so strong, that the coercive power of the will is incapable of preventing its reproduction as a mental picture; and when Sir Isaac could not prevent his imagination from conjuring up the sun's image, he was precisely in the state of a person subject to spectral illusions. The extreme brightness of the original impression did in the one case what was done in the other by the infirm or excitable state of the nervous system. When the original cause of the strong impression was such as not to affect the mind, as in Sir Isaac's case, and in that of Nicolai, Sir Robert Liston, and others, the spectres occasioned no alarm; but when, as in some cases of insanity, the mind is overset by a sudden and overwhelming calamity, or the health impaired by severe disease affecting the nervous system, not only is the coercive power of the will destroyed, but the mind is unable to discriminate between real and false impressions.

It would appear, then, that the power of reproducing past perceptions is proportional to their original force, and to the

frequency with which they have been conveyed to the mind ; and it is not difficult to understand how nervous filaments, that have been vigorously put in action by an overpowering physical impression, or repeatedly influenced by a number of weaker impressions, should more readily retransmit that impression, and retransmit it, in opposition to the will, to the nervous expansions, than if they had never performed any such function.

With the aid of these principles, we are in a condition to give a rational explanation of many of the perplexing phenomena to which we shall call the reader's attention in treating very briefly of the following subjects :—

Human Electricity.	Spirit Rapping.
Mesmerism, or Animal-Magnetism.	Spirit Writing.
Electro-Biology.	Communication of Physical
Phrenology.	Qualities to Matter.
Phreno-Mesmerism.	Second Sight.
Magneto-scope.	Apparitions.
Divining Rod.	Coincidences.
Table Turning.	Epidemical Manias.

1. *Human Electricity.*—Various electrical phenomena have been long observed in the human body during the combing of the hair, the rubbing of the breast and arms, and the pulling off of silk stockings and other parts of the dress. These phenomena were produced simply by friction ; and it has been placed beyond a doubt, by experiments made by Saussure, when he was perfectly naked, and confirmed by Volta, Landriani, and the Abbé Bertholon, that no electrical indications are ever given out by the human body that may not be accounted for by ordinary principles. It has been proved, however, by Matteucci and Dubois Reymond, that there are electrical currents in the frog and in all other animals, whether cold or warm blooded. According to Matteucci the intensity of the current increases in proportion to the rank the animal occupies in the scale of animals, while the persistency of the current diminishes in the same proportion. We have seen the beautiful experiments which he performed by making a galvanic series of the half thighs of frogs, each half thigh having one end placed upon the middle of the other half thigh. The current produced in a battery of this kind not only deflected the needle of the galvanoscope, but decomposed iodide of potash.

These interesting researches have been pursued with great success and simultaneously by M. Matteucci, and M. Dubois Reymond, who has invented the following apparatus for exhibiting human electricity by its action upon a very delicate galvanoscope.

Having fixed to the two ends of the galvanoscope two plates of platina, perfectly homogeneous, he plunges these plates into two vessels filled with salt water, and he introduces into these vessels the two corresponding fingers of his two hands. At the first immersion of the fingers there is always a more or less marked deviation of the needle, the deviation of which does not follow any law, and is therefore probably owing to something heterogeneous in the skin of the finger. When there is a wound in one of the fingers the deviation is stronger than usual. When this irregularity has disappeared, and the needle has returned to zero, the operator forcibly stiffens or contracts all the muscles of one of his arms, and immediately the needle begins to move, sometimes through a space of 30° , indicating by its direction an *inverse* current of electricity, or one passing from the hand to the shoulder. Strong persons produce the greatest effect, and sometimes no effect is produced by particular individuals. We had an opportunity of witnessing this and other curious experiments, which were exhibited at the Royal Institution in May 1852. The galvanoscope used by M. Dubois Reymond consisted of a wire 16,752 feet, or $3\frac{1}{4}$ miles long, and $\cdot 0055$ of an inch in diameter. The wire made 24,160 turns on the frame upon which it was coiled.

This beautiful instrument has been improved by Mr. Rutter, who has given a description and drawing of it in his volume on Human Electricity. The improved instrument is much more sensitive than that of M. Dubois Reymond. Although Mr. Rutter uses only 1000 feet of wire, and employs only pure water in the vessels, yet children of both sexes of only twelve years of age can deflect the needle with as much force as adults.

The result of all these experiments is a very important one. They prove the existence of electrical currents in the human body; but they shew, at the same time, that the electricity is too feeble to be communicated by ordinary contact either to another person or to material bodies, whether they are non-conductors or conductors of electricity.*

2. *Mesmerism, or Animal Magnetism.*—The phenomena and the pretensions of mesmerism are too well known to require very special notice. In order to produce the mesmeric state, the mesmeriser makes certain passes or movements of his hands before the face and along the body of the patient, and continues these movements till sleep is produced. By such a process the mesmeriser acquires an influence over the actions and even the thoughts of the patient. Somnambulism or sleep-walking is in-

* Mr. Rutter mentions an experiment in which "the muscular current can be passed through a second person included in the circuit."—P. 129.

duced. Sensations and impressions of a particular kind are greatly increased in intensity, while there is a perfect insensibility to others. Pain ceases to be felt, and the most painful operations may be performed without the knowledge of the sufferer. When these effects of mesmerism are witnessed for the first time, the sceptical observer, though at first surprised, speedily attributes them to collusion between the parties; while the credulous receive them with avidity, and willingly admit the pretensions of the mesmeriser to work still greater wonders. The effects which we have just enumerated are doubtless real. They have been established by incontrovertible evidence; and we shall presently see, when we treat of hypnotism and electro-biology, that they may be referred to principles either well known, or capable of being rigorously established.

But the mesmerist is not satisfied with the limitation of his powers to results like these. He professes to possess an influence within himself,—a magnetic or some analogous force which he transfers to his patient, affecting him without his being conscious of it. The mesmeriser is thus placed *en rapport* with the person mesmerised. He can read his thoughts,—he can, by his silent will, set him to sleep at any distance, and without his knowledge. He can breathe a dream into a glove, and generate the dream in the person to whom it is sent; and he can, by the attractive power of his hand, raise a prostrate mesmerised patient several inches from the floor on which he lies. No less remarkable are the supposed powers of the mesmerised patient. He, or rather she, by the power of *clairvoyance*, can read through opaque media—decyphering words in boxes and nutshells—telling the thoughts and the actions of persons at a distance whom she never saw—penetrating into the past—scanning the present—and predicting the future. The most common, however, of these pretensions, is to describe the interior and exterior of houses which they never entered or saw, to name the pictures, and tell the position of the chairs, tables, and other articles of furniture. But this is not all. They can see the interior condition of the person whose hand they hold, descry the morbid parts of his frame, and, blindfold, select from a homœopathic medicine-chest the very medicine which is to cure the disease. They are agonized with the sufferings of their second self, and, like the Siamese twins, their nerves vibrate to the same sensations. We have seen and studied many of these pretensions. We have doubtless been perplexed by the apparent success with which some of them were attended; but in many we saw only successful guesses, and in others the most shameful trickery and collusion.

We will not insult our readers by the detail of any of the ex-

postures which have been made of these pretensions, and shall only attempt to give an explanation of any of those cases which perplexed and surprised us. In all such, when the parties seemed to be honest, the results were mere coincidences,—events in accidental juxtaposition, which, as we shall see, play a greater part in the miraculous and the supernatural than is generally believed.

Some years ago mesmerism placed itself on a higher pedestal in the hands of Baron Reichenbach, who has attempted to carry mesmerism within the domain of physics. He ascribes all the phenomena of animal magnetism to a new force, called *od*, or the *odylic* force, which “has its seat in all the investigated, most dissimilar amorphous matter, the heavenly bodies themselves included, and takes its place, therefore, as a perfectly universal and all-pervading force of nature.” The patients upon which the Baron made the experiments upon which his theory is founded, were chiefly females under thirty, subject to catalepsy, palsy, and other nervous and spasmodic affections. These sensitive persons experienced sensations and attractions of a particular kind in the vicinity of crystals and magnets. The acuteness of their senses was greatly exalted, and they were then in a condition to perceive light and flame-like appearances upon magnets and crystals, the strength and distinctness of the perception increasing with the sensibility of the observer and the darkness of the place. In one very sensitive person, a magnet drawn along the arm produced a pricking or shooting sensation, and a small volcano was seen to issue from its poles, even in the bright light of day. The same flames occasionally appeared to issue from common nails or hooks of iron fixed in the wall. Several of the Baron’s patients observe large masses of light over new graves, and particularly in grave-yards that are much used. This fiery light was sometimes four feet high, and is regarded as “the luminosity of the imponderable effluvia from the chemical decomposition of corpses.” We have been present at experiments with sensitive persons with the view of confirming these results; but though large crystals of quartz and powerful magnets were used, no lights were distinctly visible. In certain states of the stomach lights of various colours pass over the retina; and even when these do not really exist, we can easily conceive that they may be produced by the fancy. It is certainly strange that the lights observed by the “sensitives” of Germany have not been perceived by those in other countries. In speaking of these experiments, Sir Henry Holland refers to a class of cases where the nervous temperament in young girls “begets a habit and intense desire of imposture, which may well be called a moral insanity;” and he adds the remark of Bacon, that “delight in

deceiving and aptness to be deceived, imposture and credulity, do for the most part concur." If any of the facts which are supposed to establish the existence of an odyllic force are *real* phenomena, philosophers would have no difficulty in obtaining a confirmation of them, and in receiving them as truths in physical science; but no distinct and unequivocal fact has ever been submitted to them, and the theory of Reichenbach is but a nebulous dream overhanging the bright region of physical truth.

3. *Hypnotism and Electro-Biology*.—When Dr. Braid of Manchester was attending a mesmeric exhibition in 1841, in which it was maintained that the animal magnetism of the mesmerist was communicated to the patient, he was much struck with the fact that the latter could not open his eyes. He regarded this as a real phenomenon, and he instituted a series of experiments, which proved that "the continued fixed stare of the patient at any object, by paralyzing nervous centres in their appendages, (the levator muscles of the eyelids,) and destroying the equilibrium of the nervous system, produced the phenomenon referred to." In order to *hypnotize* the patient, or put him into the sleepy state, Dr. Braid "takes any bright object, generally his lancet-case, between the thumb and fore and middle fingers of his left hand, and holds it from eight to fifteen inches from the eyes, at such a position above the forehead as may be necessary to produce the greatest possible strain upon the eyes and eyelids, and enable the patient to maintain a steady fixed stare at the object." The pupils of the eyes at first contract and then dilate to a considerable extent. They then assume "a wavy motion;" and if at this moment "the fore and middle fingers of the right hand, extended and a little separated, are carried from the object towards the eyes, most probably the eyelids will close involuntarily with a vibratory motion, or become spasmodically closed." If, after the lapse of ten or fifteen seconds, we gently elevate the arms and legs, the patient, *if he is intensely affected*, will retain them in that position. If not "desire him, in a soft tone of voice, to retain the limbs in the extended position, and then the pulse will speedily become greatly accelerated, and the limbs in process of time will become quite rigid and involuntarily fixed. It will also be found that all the organs of special sense, excepting sight, including heat and cold, and muscular motion or resistance, and certain mental faculties, are *at first prodigiously exalted*,—such as happens with regard to the primary effects of opium, wine, and spirits. After a certain period, however, this exaltation of function is followed by a state of depression far greater than the torpor of *natural* sleep." From this state of torpor the organs of special sense and the rigidity of the muscles may be *instantly* restored to the opposite

condition, by directing a current of air from the mouth upon the organ which we wish to excite to action; and "by mere repose the senses will speedily merge into the original condition again." An abrupt blow or pressure will de-hypnotize a rigid part; but no fact has more perplexed Dr. Braid than the singular effect of a slight puff of wind.

In 1842, when the British Association was assembled at Manchester, we saw more than once the almost incredible phenomena exhibited by patients of all classes under the influence of hypnotism; but not being personally acquainted with any of the parties, a certain degree of incredulity still attached itself to the subject; and it was not till we saw the phenomena exhibited by persons in whose honour and truth we had the most perfect confidence, that we regarded the results exhibited by Dr. Braid as real phenomena.

The discoveries of Dr. Braid seem to have crossed the Atlantic, and to have been very generally received. They were brought back to England several years ago, under the name of *Electro-Biology*, by Dr. Darling and Mr. Lewis, who, abandoning the sound views of Dr. Braid, referred the phenomena to influences proceeding from themselves. Instead of looking at an object in the hands of the operator, the patients of Dr. Darling looked at a metallic disc of zinc and copper, as if a galvanic influence proceeded from their mutual action. Mr. Lewis made the patient, or the whole of an assembled company, stare at himself, and, looking round him, he generally saw *one*, if not more, influenced by the act. The medical men of Edinburgh and others at first regarded the effects thus produced as the result of collusion; but when persons of the highest and gravest character became subject to the electro-biological influence, they were compelled to abandon their position, and seek for another cause of the phenomena.

Our narrow limits will not permit us to describe individual exhibitions which we have witnessed. The general results, however, must be briefly noticed: An electro-biological patient cannot open his eyes when he is told he cannot. He cannot rise from his chair. He cannot sit down upon it. He cannot keep his seat when he is told the chair is getting hot. He coughs and he sneezes when he is told he cannot avoid doing it. He tastes water as wine or bitters. He sees a horse in a drawing-room, without seeing the piano which stands upon the same spot, or the pictures on the wall behind the imaginary horse. He will take a stick for a fowling-piece, and after shooting a partridge with it, he will pick up the bird and put it in his pocket. If he is told in a particular way, by seizing his arm and rubbing it, that he has no sensation in that arm, you may prick it and

pinch it without his feeling any pain. He cannot tell his own name. He cannot spell the most familiar words. He cannot speak without stammering, and he cannot add 2 to 3; and yet he can do all these things when he is told he can. One of the most remarkable results is, that if his brother is seated beside him, and he is told that it is another person, even a lady, he instantly loses the vision of his brother, and sees the lady distinctly in the chair. We are disposed to think, from some results which we saw, that if he had been told that his brother was Napoleon, he would not have seen him in the chair, owing to the improbability of a deceased person being alive.

Such being the admitted facts in electro-biology, how are we to explain them? Are they produced by an electric or magnetic power residing in the operator, and transmitted to the patient? or are they produced, as Dr. Braid first suggested, and as is now admitted by the most eminent of our medical practitioners and physiologists, "by the concentrated mental attention of the patient acting on his own physical organism, and the changed condition of the physical action thus induced reacting on the mind of the patient?" Dr. Braid also endeavoured to prove, "that by the patient concentrating his attention on any part of his body, the functions of that part would, to a certain extent, be altered or modified, according to the predominant idea and faith which existed in his mind during the continuance of such fixed attention." In order to illustrate and extend this explanation, let us take the case of the patient who in our presence saw and examined a fine bay-horse in Dr. Gregory's drawing-room. The patient *willingly* submitted to the operation of being biologized, and was not disposed to resist the influence or the suggestion of the operator. Though his eyes were open he was in a dreamy state, or a state of somnolence, such as is occasionally produced by ordinary sleep. When the operator asked him if he would purchase a fine bay-horse, and requested him to examine it, he saw the horse in his mind's eye, or, as we have already shewn, in his body's eye, painted on the retina by the reverse action of his mind, and by the law of visible direction he saw it placed in front of him. The picture of the piano, which the horse concealed, made no impression on his retina, because it was obliterated by the more deeply impressed picture of the horse. He therefore saw the bay-horse as distinctly as if it had been before him. He was told that it had a splint in one of its legs, and he stooped and felt its ankle, which happened to be the leg of the piano. In some cases of spectral illusion the mental picture is seen mingling itself with the picture of external objects, the mental figures often rising out of the gilt frames of pictures on the wall, till one or other gains the mastery. The powerfully-expressed suggestion of the operator

that there was a horse before him, made the picture of it predominate over that of the piano; but when the operator took the patient out of his trance, the suggested picture disappeared, and the piano took its place. In this way we may explain all the illusions to which his senses were subjected.

The insensibility of the patient even to pain, his inability to speak, run, or walk, arose from that wonderful power which the mind exercises over the body, in altering all its sensations and functions. We all know that diseases may be endured, and morbid affections modified or removed by the concentrated attention of the patient. The performance of the most painful operations in surgery, as described by Dr. Esdaile in the two works in our list, when the patient is in the mesmeric state, places this influence beyond a doubt. In the state of hysteria in females, diseases of the knee-joint may be produced solely by the mind, "the joints being affected with pain, and a great degree of morbid sensibility, attended occasionally with some degree of tumefaction." In these cases, abscess and destruction of the joint never ensued, and the patients complained no more of their knee when they recovered from hysteria.* Sir Benjamin Brodie informed the writer of this article, that many examples of this influence of the mind had occurred in his practice. In the interesting work now quoted, he remarks, that "the liability to hysteria among females is one of the severest penalties of high civilisation;" and he "does not hesitate to declare, that at least four-fifths of the female patients which are commonly supposed to labour under diseases of the joints, labour under hysteria and nothing else." The views of Sir Henry Holland, which we have already stated, "on the effects of attention on bodily organs," throw much light on this branch of our subject; and we are disposed to think that the medical practitioner does not avail himself sufficiently of this singular power in the cure of disease;—we do not mean of hypnotism, or the mesmeric state only, but of the ordinary influence of the patient's mind, directed by the energetic suggestion of his physician.

The importance of hypnotism, as a curative agent, has been placed beyond a doubt by Dr. Braid in his curious treatise "on Hypnotic Therapeutics." In certain cases, indicated by experience, he uses hypnotism alone, in others in conjunction with medicines; but in the great majority he does not use it at all. His general principle is, that *natural functions may be either excited or depressed, according to the faith and confidence of the patient, or to express it otherwise, by means of a fixed dominant idea.* In this way he has cured many cases of *tic douloureux*, *nervous*

* *Lectures Illustrative of certain Local Nervous Affections.* By SIR BENJAMIN C. BRODIE, Bart., p. 54.

head-ache, paralysis, rheumatism, chronic gout, epilepsy, tonic spasm, St. Vitus's dance, hysteria, spirital irritation, distortion, natural somnambulism, &c. Even in affections of the eyes hypnotism has been found successful when other means had failed. By accelerating the circulation Dr. Braid has cured chronic cases of opacity of the cornea, and acute cases by retarding the circulation; and we have lately received from him a very interesting case in which almost total blindness was cured by the hypnotic process. Physiologists of high rank have called the attention of the medical world to Dr. Braid's process as one of the most effectual methods of curing disease.

Before leaving this part of our subject, we must mention the influence of concentrated attention in enabling persons not in the biological or hypnotic state to perform acts of which they would otherwise be incapable. The remarkable experiment described by Sir David Brewster, in his *Treatise on Natural Magic*, in which a heavy individual lying on his back may be lifted with the greatest facility by four persons on the points of their fingers, is ascribed by Dr. Braid "to the extraordinary influence of dominant ideas in producing muscular action in accordance with themselves, without any conscious effort of volition" on the part of the lifters. Mesmerists had ascribed this effect to an electric power passing from the hands of the lifters, and maintained that the body could not be lifted if a board were interposed between it and the hands of the lifters; but no such explanation is necessary. The fact that the lifters applied their strength simultaneously, when the chest was kept filled with air by the closing of the *rima glottidis*, and when the lifting muscles had a point of support on the distended chest, is a sufficient explanation of the phenomenon, though the expectant attention no doubt contributed to the effect.

4. *Phrenology and Phreno-mesmerism.* In introducing these two subjects at present, we do not propose to discuss them at any length. In previous articles we have expressed our utter disbelief in the facts and principles of phrenology.* The determination of the intellectual and moral qualities of individuals, as obtained from the magnitude and form of the skull, may be effected as well by palmistry or the shape of the hand, by the handwriting of the individual, or by toe-ology, a process by which a clever authoress has jocularly proposed to determine them by the form of the human foot. Very wonderful coincidences have been obtained by all these methods, and might be obtained from any other part of the human frame. Sir Henry Holland has written a brief, candid, and able chapter on this subject, which we recommend

* Vol. ii. p. 502.

to the study of the reader. M. Baillarger, one of the latest students of the brain, has, by a new method of unfolding and measuring its surface, been led to the opinion, *that there is no relation whatever between the intelligence of animals and the extent of the cerebral surface.* But, independent of this, the periphery of the brain, as Sir H. Holland remarks, is singularly devoid of any indications of that division of it into separate portions or faculties which phrenology requires; and we may add, that if such a division did exist, and if the development of those portions were indicative of mental qualities, the form of the external bone would not make us acquainted with them. It is a curious fact, that our late able and accomplished friend, Mr. Sheriff Colquhoun, who believed in magic, witchcraft, and animal magnetism in their most extreme forms, pronounces phrenology to be a pseudo-science, which, after forty years' study, and the examination "of the heads of hundreds of individuals, notorious for the manifestation of particular faculties and propensities," he pronounces to be absurd and dangerous.*

If phrenology has no foundation in theory, and still less in practice, what can we say of *phreno-mesmerism of which it is the root?* That touching particular parts of the head will make a hypnotized patient laugh, pray, sing, steal, and fight, is a doctrine which we do not scruple to rank among the wildest and most dangerous that has ever been propounded, and we cannot but express our astonishment that it should be maintained by Dr. Braid, who has shown so much sagacity in rejecting the less extravagant pretensions of the mesmerists. Sir Henry Holland and other physiologists have not condescended to denounce phreno-mesmerism, and we shall content ourselves with having ranked it among the extravagancies of modern credulity.

1. *Trance, or human hybernation*, as it is called by Dr. Braid, form of profound sleep or catalepsy, in which "all the vital functions are reduced to the minimum of what is compatible with continued existence and restoration to their former activity." This peculiar condition of the human frame is so nearly allied to the mesmeric, or hypnotic, or biological state, that those who believe in the one cannot reject the other. The condition of trance can be induced by suppressing the respiration and fixing the mind; and we cannot convey a better idea of it than by giving, after Dr. Cheyne of Dublin, the following account of the case of Colonel Townsend of Bath, a gentleman of a high and Christian character:—

Colonel Townsend could die or expire when he pleased; and yet, on effort, or some how, he could come to life again. He insisted

* *History of Magic, &c.*, vol. i., Preface, pp. lxx-lxi.

so much upon our seeing the trial made, that we were at last forced to comply. We all three felt his pulse first; it was distinct, though small and thready, and his heart had its usual beating. He composed himself on his back, and lay in a still position for some time; while I held his right hand, Dr. Baynard laid his hand on his heart, and Mr. Skrine held a clean looking glass to his mouth. I found his pulse sink gradually, till at last I could not feel any by the most exact and nice touch. Dr. Baynard could not feel the least motion in the heart, nor Mr. Skrine perceive the least sort of breath on the mirror he held to his mouth. Then each of us by turns examined his arm, heart, and breath, but could not by the nicest scrutiny discover the least symptom of life in him. We reasoned a long time about this odd appearance as well as we could, and finding he still continued in that condition, we began to conclude that he had indeed carried the experiment too far; and at last *we were satisfied that he was actually dead, and were just ready to leave him.* This continued about half an hour. By nine in the morning, in autumn, as we were going away, we observed some motion about the body, and, upon examination, found his pulse and the motion of his heart gradually returning, he began to breathe heavily, and speak softly. We were all astonished to the last degree at this unexpected change, and, after some farther conversation with him and among ourselves, went away fully satisfied as to all the particulars of this fact, but confounded and puzzled, and not able to form any rational scheme that might account for it."

In repeating this remarkable experiment on a subsequent occasion, Colonel Townsend actually expired.

Various cases of this species of voluntary trance have occurred in India, and have been described by trustworthy observers. Fakeers and others have been buried alive for long periods, sometimes six weeks, and have been taken up and restored to their usual health and activity. Dr. Braid has collected a number of interesting and well authenticated cases of this kind; but our limits will not allow us to refer to more than one of these, which was seen and carefully investigated by Sir Claude Wade, a gentleman of whose high character, great talents, and acuteness as an observer, we can speak from personal knowledge. The Fakeer was buried alive at Lahore in 1837. Sir Claude Wade did not arrive till a few hours after his actual interment; but he had the testimony of Runjeet Singh, and the most credible persons of his court, that he was buried and the building sealed up, and guarded night and day by four sentries, who were relieved every hour. A daily report of the state of the building was made by the officers of the Court. The mud wall having been dug away; the seal removed from the keyhole of the padlock, Sir Claude and Runjeet Singh descended into a sort of cell, where there was a wooden box four feet long by three broad.

The seal and padlock of the box being opened, the Fakcer was seen placed upright in a bag of white linen, fastened by a string over his head. The Fakcer's servant took the body out of the box, and when the bag, which was mildewed, was torn open, they examined it sitting with their knees almost touching it. "The legs and arms were shrivelled and stiff, the face full, and the head reclining on the shoulder like that of a corpse;" a medical attendant could discover no pulsation in the heart, temples, or arm. The Fakcer's servant began the process of resuscitation by pouring warm water over the body, gradually relaxing its arms and legs, Runjeet Singh and Colonel Wade taking each a leg, to restore it by friction from its contracted state. During this time the servant placed a hot wheaten cake, about an inch thick, on the top of the head, a process which he repeated twice or thrice. He then pulled out of his nostrils and ears the wax and cotton with which they were stopped, and, after great exertion, opened his mouth by inserting the point of a knife between his teeth, and while holding his jaws open with his left hand, drew the tongue forward with his right—in the course of which the tongue flew back several times to its curved position upwards, in which it had originally been, so as to close the gullet. His eyes when opened by friction, with clarified butter or *gee*, were quite motionless and glazed. Upon applying the hot cake for the third time, the body was violently convulsed. The nostrils became inflated: respiration ensued, the limbs began to assume a natural fulness, but the pulsation was still faintly perceptible. He then swallowed some *gee* placed on his tongue, and immediately the eyeballs became dilated, and recovered their natural colour. Recognising Runjeet Singh sitting close to him, he said in a low sepulchral tone, scarcely audible, "Do you believe me now?" Runjeet replied in the affirmative, and invested the Fakcer with a pearl necklace, a superb pair of gold bracelets, and pieces of silk, muslin and shawls. Not more than half an hour elapsed from the opening of the box till he recovered his voice, and in another half hour he talked with all around, though feebly, like a sick person. According to the Hindoo physiologists, *heat* constitutes the self-existent principle of life, so that "if the functions of the other elements are so far destroyed as to leave that one in its perfect purity, life could be sustained for a considerable length of time, independent of air, food, or any other means of sustenance."

Other cases of the same kind are related, in one of which the body was merely wrapped in a cloak, laid, without a coffin, in an ordinary grave, and covered with earth. After many days the body was taken up and restored to life by the same process.

The Magnetoscope or Odometer. The history of the mag-

netoscope or odometer, which depends on the same principles as its precursor the divining-rod, is curious. It appears from a passage in Ammianus Marcellinus,* as quoted by M. Chevreul, that, so early as the fourth century, a ring suspended by a thread was an instrument of divination. This pendulum, after due consecration, was made to oscillate in the intervals between the letters of the alphabet; and those at which it successively stopped formed heroic verses, which were the answers to the questions that were put to it. In a work published in Paris in 1582, entitled *Les Bigarrures du Seigneur des Accords*, the chapter headed *Des Faux Sorciers et de leurs Imposteurs* contains the following passage,—“Others have a trick in which they seem to attach a ring of gold or silver to a fine thread, which they suspend in a glass half full of water, and having dipped it three times, and repeated as many times in a low voice the following verse of a psalm,—‘Lo, thou hast loved the truth, shew me the hidden things of thy wisdom,’ the ring will then strike upon the glass whatever be the hour of the day.”

Schottus, in his *Physica Cuidra*,† printed in 1662, and Kircher, in his work *De Mundo Subterraneo*, printed in 1678, mentions this pendulum as used for finding the hour of the day. In the eighteenth century it was revived by a French officer; and, in 1798, under a scientific form, by M. Gerboin,‡ Professor of Special Medicine at Strasburg. Gerboin ascribed the motions of the pendulum to an *organo-electric* force, which was *expansive* in some persons, and *contractive* in others: the touch of a person possessing the *contractive* quality inverting the direction of the pendulum, while it moved from left to right in the hand of one possessing the *expansive* quality.

M. Ritter§ repeated these experiments with a pendulum consisting of a string twelve or eighteen inches long, suspending a cube of iron pyrites. When held above the poles of a magnet, above water, or different metals, or different parts of the human frame, it oscillated in different directions, and with different degrees of force.

These curious experiments attracted the attention of M. Chevreul, a distinguished member of the Institute of France, who repeated them in 1813, and discovered their true cause. M. CErsted, the celebrated discoverer of electro-magnetism, who was then in Paris, was disposed to place confidence in the pendulum; but when M. Chevreul had published his experi-

* Lib. xxix.

† Lib. xii. p. 153.

‡ *Recherches Expérimentales sur un nouveau mode de l'action électrique.* 8vo, p. 356, Strasbourg, 1808.

§ *Recherches Physiques intéressantes*, in the *Feuille du Matin*, No. 26, Jan. 30, 1807. Tübingen.

ments in 1833, in a letter to Ampere, the Danish philosopher ceased to believe that the pendulum was moved by an influence residing in the bodies over which it was held.

We regret that want of space prevents us from giving an account of M. Chevreul's experiments, but we are persuaded that every person who intelligently peruses his interesting volume will adopt his conclusions. He has shewn that when we hold the pendulum between the fingers, the muscular motion of the arm causes the pendulum to oscillate, and its oscillations to increase, by the influence which the sight exercises in putting the operator into the peculiar state of a *disposition or tendency to motion*. In like manner, the pendulum will stop when we have simply the *thought of trying if such a thing will stop it*. "There is then," says M. Chevreul, "an intimate connexion established between the execution of certain movements, and the act of thought which is relative to it, though this thought is not yet the will which commands our muscular organs. It is in this point of view that the phenomena which I have described seem to have some interest for psychology, and even for the history of the sciences: They prove how easy it is to mistake illusions for realities, whenever we are occupied with phenomena in which an organ performs a part, and that in circumstances which have not been sufficiently analyzed."*

The experiment with the pendulum has, we believe, never been extinct. We have seen it, fifty years ago, often succeed, and as often fail, in striking the hour of the day. It was lately revived in Germany, and shewn to Dr. H. Mayo by Herr Caspari, with some variations. Mr. Rutter of Brighton investigated the subject; but instead of holding the pendulum between his finger and thumb, he suspended it at the extremity of a rod of brass, and touched a brass knob at the other end of the rod. The magnetism or electricity of his body passed, according to the theory, into the pendulum, and caused it to revolve in a circle of greater or less size from *left to right*. When a lady operated, the pendulum moved from *right to left*, and when the pendulum was revolving from *left to right*, under the influence of Mr. Rutter, it would stop and revolve in the opposite direction by placing the glove or handkerchief of a lady upon Mr. Rutter's arm. We were invited to see these experiments by a distinguished party who wished our opinion. We accordingly went to Brighton, and certainly witnessed phenomena of the most extraordinary description—phenomena produced either by electrical currents, male and female, or what was more probable, by an *involuntary* impulse given to the pendulum by Mr.

* *De la Baguette Divinatoire, &c.*, pp. 157, 158.

Rutter, whose talents and character protected him from all suspicion of collusion with his instrument.

The magnetoscope, as the instrument has been called, was improved by Dr. Leger, who, in order to remove all suspicion of the pendulum being influenced voluntarily by himself, added another pendulum at the extremity of the brass rod, but connected with it by whalebone, or dead animal matter, along which it was believed the human electricity would not pass, while it would carry freely to the second any mechanical impulse that he might be supposed to give to the first pendulum. This second pendulum always stood still while the first moved, so that the spectator drew the conclusion that no impulse of a mechanical kind was given to the first, seeing that the second remained at rest. If there was imposition in the case, we cannot but admire the ingenuity of using the second pendulum at the end of a piece of whalebone.

With this instrument Dr. Leger proposed to determine the amount of moral and intellectual qualities in any individual seated beside him. Placing a finger of his right hand upon the knob of the magnetoscope, and a finger of his left hand on any phrenological organ, the degree of its development was measured by the extent of the oscillations of the pendulum. Certain organs made it revolve from right to left, others from left to right, some rectilineally, from north to south, and others from east to west. When the 36 organs, including 10 propensities, 10 sentiments, 12 intellectual faculties, and 4 reflective faculties, were thus examined, and their intensities expressed numerically, 5 being the average of each, it was not difficult to deduce the character of the patient. The writer of this article went frequently to Dr. Leger with many persons of high rank and talent, and though Dr. Leger did not know their names, and had never, from being a stranger, seen one of them, the account which he gave of them was truly marvellous; and in a letter which we received from Colonel Chesterton, he mentions his astonishment at the accuracy of the results obtained by Dr. Leger, after examining the criminals and other persons under his charge, of whom the Doctor could know nothing. The same regard for truth which induces us to make these admissions, compels us to state that a distinguished nobleman whom we had accompanied to the magnetoscope, went a second time in a different costume, disguised with false moustaches, and obtained a character, both moral and intellectual, essentially different from the first!

A belief in the indications of the magnetoscope involves not only a belief in phrenology, and in animal magnetism, but, what no natural philosopher can admit—in a physical influence

passing into the pendulum, and communicating to it rotatory and oscillatory movements. But even if we believe that such influences do exist, and communicate such motions, the admitted fact that the motions cannot take place if the operator shuts his eyes, would decide the question. That a picture of the pendulum on the operator's retina could produce the influences and the motion, no rational man can believe. The movements are produced solely by the expectant attention of the operator, if he is honest, involuntarily directing all the movements of the pendulum. The same explanation applies to all those experiments in which the human hand is employed to suspend rings, and shillings, and books, which all move in the direction we wish or expect, or, as Dr. Braid expresses it, "under an unconscious muscular influence arising from dominant ideas in the minds of subjects."

Table-turning and table-talking.—Those who believed in the rotation and oscillation of rings and pendulums could not fail to believe that the same influence might turn tables; and had the pretensions of the table-turners gone no farther, the experiment might, like the shilling striking the hour, have long remained as an amusement for the nursery and the drawing-room. But when, under their influence, the tables obeyed their will and commands, lifting up their legs and striking the age of any of the operators,—discovering things that were hid or lost, by moving to the spot where they were to be found,—pretending to be the result of Satanic agency, "disclosing," according to the Rev. E. Gillon, "Satanic wonders and prophetic signs," moving with all other books but the Bible, which instantly stopped them, and bringing messages from heaven and hell to gratify the morbid curiosity of the credulous, it was time that science should rush into the magic circle, and exorcise the demon that had usurped it.

That the hands of the table-movers acted upon it mechanically, and in the direction of the motion, was proved by an exhibition, which we witnessed, that, when the hands of even a professional table-mover, Mrs. Haydon, were smeared with oil, the table could not be put in motion. The same truth was established by repeated experiments, in which tables could not be moved when the operators were careful to prevent their hands from doing anything more than simply resting upon their surface; but it was placed beyond a doubt by the experiments of Mr. Faraday,* who proved that whenever a table was turned, the hands of its movers exerted upon it a force in the direction of its motion.

When table-turners make the experiment honestly, which we

* *Athenæum*, 1852. P. 891.

believe is often done, they involuntarily exercise a muscular force under the influence of the same principle which guides the finger of the operator when placed upon the magnetoscope.

It is with difficulty we can bring ourselves to notice the extravagance of those who maintain that tables have moved at the will of an individual seated at a distance from them;—that hats can be lifted up by the attractive power of hands not in contact with them, and that the human hand can impart to any object, which it grasps, such an attractive influence for all other objects of the same material, of the same nature, or the same form, that it will lead or draw its possessor to such objects, even when they are concealed from his view.*

8. *Spirit-rapping and Spirit-writing.*—Among the moral epidemics of the day, none is more remarkable than that of spirit-rapping,—an importation from the United States, where it has for some time been raging with a fatal influence, gratifying with lying intelligence the prurient curiosity of fools, and driving into bedlam the half insane, who have received distressing news from the world of spirits. In order to get information from the spiritual world there must be a *medium* of communication, and this office is assumed generally by some artful or presumptuous female, who feels herself qualified for the task. At the beginning of 1853 there were no fewer than 700 mediums in the town of Cleveland, and 1200 in that of Cincinnati. In 1853, Mrs. Haydon, an American lady of great sagacity and penetration, exhibited in London her powers as a medium. When she was seated at a little distance from a table upon which there was placed an alphabet, the victim of curiosity put certain questions to her mentally, which a departed spirit was to answer. This answer was communicated by raps upon the table, while the finger of the victim passed over the alphabet. If the answer, for example, was YES, a rap was heard when the finger came to Y, which was written down. The finger again ran over the alphabet, and raps were successively heard when it reached E and S.† The same process was followed when the answer was NO, or a complete sentence. Many remarkable answers were thus obtained by several persons of character and intelligence, which at first produced a great sensation. When we submitted to the operation, however, it was an entire failure. Mrs. Haydon's success consisted in observing some pause in the finger when it reached the proper letters, or some act or movement of the victim when these letters were touched. When

* This doctrine is maintained in the last book in our list, No 28

† In 1848, when this mania began in America, in the house of a Methodist family of the name of Fox, the letters of the alphabet were pronounced by the person who wanted information.

the experiment was made by persons who paused on other letters than those which formed the right answer, Mrs. Haydon always failed.

Some interest has been attached to the discovery of the process by which the *rap* was produced. As everybody expected it from the table, it always appeared to come from it, on that principle of ventriloquism, according to which a sound made in one place may be heard as if it came from another to which the attention is directed. It was believed in America, that tables were made on purpose, but as Mrs. Haydon held her *séances* in private houses, a table of a particular construction was not required. The process, however, which is a very curious one, has been recently discovered and explained by Dr. Schiff of Frankfort-upon-Maine. He had noticed that the rap proceeded from the body of a young girl who was performing the part of a medium, and he succeeded in demonstrating experimentally that a similar noise could be produced by the repeated displacement of the tendon of the *peroneus longus* muscle in the sheath in which it slides in passing behind the external *malleolus*. Dr. Schiff, indeed, succeeded in producing upon himself the very same sound which he had heard from the spirit rapper. When the fibrous sheath in which the tendon of the *peroneus longus* slides is feeble or relaxed, the sound is more easily produced; and Dr. Schiff has shewn that the sound may be made without any appreciable motion in the foot. When the little toe presses upon the external *malleolus*, where the noise is produced, the alternating and repeated displacement of the tendon having a very brisk motion of ascent and descent is very distinctly felt. After Dr. Schiff's memoir had been read at the Academy of Sciences, he made the experiment at the request of the members, and the sound was distinctly heard at the distance of several yards, without any motion being observed in the feet.*

Akin to spirit-rapping is the still stranger practice of *Spirit-Writing*. A medium, anxious for information from the spiritual world, sits down with a pen in hand, and thinks intensely upon some departed spirit from whom he wishes instruction, or advice, or consolation. His pen then records on the paper, by an involuntary effort, the desired intelligence, which, as we have been informed by those whom we have seen practise the art, is often unintelligible, and sometimes ill-spelt and bad grammar. In this case, certainly, when a suitable despatch is in this way recorded, the expectant attention must have guided the recording pen.

9. *Apparitions, &c.*—In our list of books we have placed a

* *Comptes Rendus, &c.*, vol. xxxviii. pp. 1063, 1064.

very interesting volume, by Mr. Nethen Radcliffe, which treats of apparitions and various forms of the supernatural, and another on magic, by Joseph Ennemoser, to which the translator has appended numerous stories of apparitions. In the work of Mr. Radcliffe, which may be safely put into the hands of the young, a rational explanation is given of the principal phenomena which he describes: In that of the German author there is no limit set to our credulity—no spot upon which faith can alight and truth inquire. The reader finds himself in a world of magic, and he will be fortunate if he does not believe himself to be a conjuror. The visions of the Old Testament and the miracles of the New, are mixed up with the legerdemain of ancient soothsayers, the witchcraft of recent times, the hallucinations of religious fanaticism, animal magnetism, vampyre graves, fairies, spirit-rapping, and all the delusions of modern necromancy. The wise may read this book with advantage; we would willingly conceal it from the young and the ignorant.

It would be an endless and unprofitable task to attempt to classify and explain the various apparitions which have been recorded in history. The largest portion of these have been the offspring of illusions of the eye and the ear, and have been well explained by persons conversant with the laws of vision and acoustics. Another class of apparitions originate in real phenomena, but whenever the circumstances of the case have been rigorously studied, the apparition has been found to be either a biped or a quadruped, which accident has placed in some abnormal position. There is, however, a third class more difficult to dispose of, namely, those which have been seen by more than one individual. In such cases the organs of sense are less likely to be imposed upon,—the supernatural appearance of real living persons is less likely to be misjudged, and two minds are less likely than one to dwell long upon the same object. Two, and even more persons, however, may be equally deceived by illusions of sense,—by the false appearance of real objects, and may, from the concurrence of unusual circumstances, have their minds impressed with one exciting idea, or with the mental picture of one individual. In the cases under our consideration, two persons are said to have seen the apparition of a friend, who was afterwards found to have died about the time when the apparition was seen. In order to decide upon such a case, we would require to examine rigorously the parties, and to ascertain what they did see, and what was the date and nature of the event which the apparition was supposed to accompany. We all know how such stories change their form when they are re-told and believed; and we might be disposed to listen to them, if they had been employed for any useful purpose—to startle the ungodly

in his unhalloved orgies, or arrest the criminal in his vicious career.

10. *Second Sight and Presentiment.*—In the apparitions perceived by what is called Second Sight, persons are seen at a distance, though “at that moment dying or dead,” “not in a faint light, but in their natural aspect and colour, not by one terrified peasant, but by two or more self-possessed and educated men. Nay, some of these *are said* to have spoken, and to have done so for a purpose.” The story of Lord Lyttelton has been cited as a case of second sight, but such of our readers as have perused a previous Article in this Journal* will arrive at a different conclusion. In a recent case of second sight communicated to us by the gentleman who saw it, two fishermen whom he knew were seen by him in his evening walk. He accosted them in passing, but learned from his servant, next morning, that the two men had been drowned in the bay during the night. We believe that our informant saw what he described, but we equally believe that some cause or other had turned his mind to these men, while it was in that state which is favourable to reverie. If this gentleman had noted down all the cases in which he had had distinct visual impressions of his friends, without these impressions being accompanied with any remarkable event, he would have regarded the sight of the fishermen and their death as a simple coincidence. At the present moment, during the prevalence of war and pestilence, are there not many relations and friends of ardent temperaments who may mentally dread events which actually take place, and many more who have as vivid a perception of events which never happen? This remark leads us to say a few words on the subject of coincidences.

11. *Coincidences.*—A philosopher of distinguished eminence, a few years ago, wrote four or five letters to friends, and strange to say, they were all returned to him because the parties were dead. This remarkable fact led him and his family to note the coincidences of which they became cognizant, and we have reason to believe that their collection, if given to the world, would be as instructive as it is interesting. In the ordinary cases of coincidences, there is a natural tendency in the mind to place two concomitant events in the relation of cause and effect. The mind will not scruple to commit a slight anachronism to bring them together, or to modify the one or the other to make them coalesce, and just as the physical eyes are not at rest till they force the binocular pictures into coalescence, so the mental vision, bent on the supernatural, will place in the relation which it desires, events neither related in time nor in cha-

* See Vol. xix. No. 38, pp. 506-508. See also Radcliffe's *Friends, Ghosts, and Spirits*, p. 226.

racter. We know not what the gamester thinks when his dice necessarily exhibit numbers which defy theory of probabilities.

12. *Epidemic Manias*.—Did our limits permit we would give our readers some account of the epidemical manias of the middle ages,—of the dancing plagues, and convulsive disorders which appeared in Germany, the Netherlands, Italy, and Abyssinia, and which, in 1742, 1774, and 1791, afflicted the northern parts of Scotland, and in 1796 a portion of North Wales, and almost at all times portions of the United States.* To this class of epidemics the female constitution is particularly liable. Hecker informs us that, in a large convent in France, one nun began to mew like a cat, and that shortly afterwards other nuns began to mew. At last all the nuns mewed, every day, and for several hours together. The Christian neighbourhood became scandalized by this daily cat-concert, which was kept up till a company of soldiers, placed at the gate of the convent, whipped the performers till they promised to mew no more. Cardan informs us that a nun in Germany fell to biting all her companions. In a short time all the nuns began biting each other. The infatuation spread, and passed from convent to convent, throughout a great part of Germany, but chiefly in Saxony and Brandenburg. It afterwards spread to the nunneries in Holland, and the biting mania did not terminate till it reached even Rome.

The history of modern credulity, as depicted in the preceding pages, is pregnant with deep instruction. In reference to the mania of table-moving, Mr. Faraday has justly ascribed the mental condition of its votaries to a radical defect in our system of education,—in the education, we may add, of those who follow the learned professions, as well as in that of the higher and middle classes of society. We do not expect that mental philosophy can be instilled into the common mind to correct mental aberration, or that we can communicate in a general education any sufficient knowledge of the structure and functions of the human frame; but there can be no difficulty in introducing into our schools a system of instruction in which the facts and laws of the material world are taught as infallible truths, essentially different from the inferences of wild and unrestrained speculation. Minds which have the ballast of established facts and laws, or a knowledge of what can be seen and handled, are less likely to be the victims of credulity and imposture than those which indulge in light literature, and in the romance reading of the pre-

* See Hecker's *Epidemics of the Middle Ages*, p. 158, and *passim*. See also Dr. Hibbert's *Description of the Shetland Islands*, p. 341.

sent day. They have in their possession a fixed standard of truth to which they can appeal when startling phenomena and wild theories are submitted to their judgment. Who, for example, that is acquainted with the simple facts and laws of electricity and magnetism, and has seen how the electric principle passes from the human body into bodies that conduct it, and refuses to pass into non-conductors, could for a moment believe that such a principle could pass into tables and pendulums and other non-conducting materials, and impress upon them motions contrary to every known mechanical law, tossing and twisting them in all directions, as if they were the inmates of Bedlam, or frantic bacchanals under the influence of alcohol.

In these pages we have again and again impressed upon the Government the paramount duty of instructing those whom they have undertaken to govern;—but the fear of offending religious partisans has paralyzed every attempt to educate the people, and stifled every demand that has been made to uphold the educational institutions of the country. To expect from such temporary advisers of the Crown any salutary measure of public instruction—to expect it from the combined action of an uneducated vision-hunting and conjuror-worshipping population—to expect it from churchmen who, in imbibing the fanaticism of the middle ages, imbibe also their superstitions—to expect such things would be to expect truth from error or light from darkness.

Will it be believed in a future and a wiser age, did not page of history record it, that in the middle of the 19th century, in one of the intellectual centres of Europe, books have been written and greedily devoured, in which the great system of worlds, to which we belong, is said to be self-created from an universe of dust, in which man with his immortal soul, is struck from a speck of albumen by an electric spark, and in which his divine form, the pride of the sculptor, and the theme of the poet, is developed from the brainless monad and the grinning monkey? Will it be believed that the master of one of the most enlightened colleges in the world persists in teaching that the solar system is a clumsy piece of mechanism, in which the creative power has blundered through excess of energy, and that the whole universe—the firmament stretched out by the understanding of Jehovah, is a sublime failure—its noblest planets but cinders and water, and its stars sparks of vapour and chippings of planets with which the Almighty has littered his azure dominions?†

* *Veilages of Creation.*

† See a very able examination of "The Essay of a Plurality of Worlds" in the *British Quarterly*, No. 32, p. 34, a well conducted and eminently Christian

Such gigantic heresies seldom come alone. We have now before us, from Oxford, a valuable pendant to the Cambridge speculation,—another downward step in the intellectual degradation of science. In this presumptuous volume, called *Alustor, or The New Ptolemy*, the exactness of the physical sciences is denied and ridiculed,—the discoveries of Newton and the writings of Herschel are assailed,—gravity is declared to be nothing but electro-magnetism, and “the fixed stars aggregates of the same element, combined and rarified till perfectly balanced where they have been observed since the commencement of human observation!” When such *ignes fatui*—such monstrous exhalations of the mind, take root in Cambridge and Oxford, it is time that our northern Universities should guard their youth against the philosophical pestilence which threatens them. The Mormonism of the religious world is not more baneful than the doctrines of the electro-albuminous origin of life—the development of man from monkeys,—the creation of the universe by blind law,—the formation of planets out of mud, and of stars out of steam.

How different are the sentiments and how noble the efforts of that higher class, who seek to elevate the popular mind, by gathering in the rich harvest of mental produce which art and literature and science have accumulated; and of dispensing the intellectual manna to those masses of immortal beings who are perishing for lack of knowledge. “All that science has discovered,” says Dr. Biber, in his eloquent lecture at the opening of the Panopticon, “all that art has achieved, the history and literature of the human race, is a treasure to be dispensed, and that without being diminished, to all mankind. That, of this universal treasure, the common property of the human race, each human individual is entitled to receive and to enjoy a share,—is a truth which is happily now recognised beyond the possibility of contradiction. Too long has that truth been ignored; too long has knowledge, the pursuit of science, of art and literature, been considered as the exclusive property of the few. To the masses of mankind the history of man has remained a sealed book,—the treasures of human culture accumulated through the lapse of ages have been to them as if they were not. To lend a helping hand in leading men through the outer court of the temple of knowledge, in which the wonders of creation searched out by man, and the results of man’s own creative powers are displayed, to the door of that inner sanctuary where the voice of God himself is heard,—is the high privilege, as well as the solemn and responsible duty of all who have it in their power to contribute towards the attainment of so desirable an end.”

Adopting these views, and anxious that others should adopt them, we are sanguine enough to believe, that a statesman will yet arise to dispense the treasures of knowledge through national institutions, and fulfil the prediction of the poet, that Science

“ Shall be a precious visitant, and then,
 And only then, be worthy of her name. . . .
 Shall it forget that its most noble use,
 Its most illustrious province, must be found
 In furnishing clear guidance,—a support
Not treacherous to the Mind's excursive power ?
 What'e'er we see,
 What'e'er we feel, by agency direct
 Or indirect, shall tend to feed and nurse
 Our faculties,—shall fix in calmer seats
 Of moral strength, and raise to loftier heights
 Of love divine, our intellectual soul ”

ART. VII.—*Poetical Works of William Cowper.* Edited by ROBERT BELL. 3 Vols., 1854. [*Annotated Edition of the English Poets*, by ROBERT BELL, Author of the “History of Russia,” “Lives of the English Poets,” &c. v. d.]

It is a favourite saying in the present day, that “the tendencies of the age are essentially prosaic.” The precise meaning which these words are intended to convey may not be very clearly understood by the majority of those who utter them; but they seem to embody a general idea of the unpoetical character of the times. There is a confused notion in men’s minds, that the Practical and the Ideal not only cannot associate, but cannot co-exist one with the other—that the voice of Fact must bellow down the voice of Fiction—that the clangings of our iron must drown the harpings of our bards—that because we can travel on a straight road, at the rate of forty miles an hour, the excursions of the imagination and the wanderings of Fancy must be disregarded for evermore—that the generation which has tunnelled Box-hill can never care to climb Parnassus.

All this is in effect so often repeated, in one form or another, that its truth has been taken for granted by multitudes of men who echo and re-echo the cry; and still we are told that the age is unpoetical, and that the present generation is a generation of worshippers at the great shrine of Matter-of-Fact. But what, after all, is the meaning of the cry? Does it mean, that given up as we are to materialities—laying down iron roads by hundreds of miles; spanning immense rivers with arches of stone; flashing messages along electric wires with the speed of the lightning; covering the seas with magic fire-ships; multiplying by the same mysterious agency textile fabrics not wrought by hands, of a beauty and a splendour such as Solomon in all his glory never dreamt of—the intelligence and the inventiveness of the age expend themselves upon projects of utilitarianism, and intent upon the palpable realities before us, we have neither eyes to “glance from heaven to earth, from earth to heaven,” nor wings to bear us up in illimitable space; that whilst we are coining one metal into another, the brain-coinage of that great ideal currency, which is more enduring than iron and stone, must necessarily be suspended? Does it mean that the aliment of poetry is vanishing from off the face of the earth—that external and internal beauty, are both ceasing to be—that inanimate nature is more formal and the human mind more prosaic; that the seasons do not alternate, nor men’s hearts pulse as they were wont; that mechanism has usurped the world, and gross

selfishness the people ;—in a word, that the sources of imaginative inspiration are utterly dried up ?

Or is it meant, that although the few may *write* poetry, the many will not *read* it ; that our minds, harnessed, as it were, in a go-cart of one utilitarian pursuit or another, have no sympathy with anything of which the answer to the *cui bono* does not lie upon the surface ; that we have by one consent adopted the Benthamite doctrine that Poetry has no greater claims than Push-pin upon mankind, and in this “ money-making age,” arrived generally at a conclusion that it “ does not pay.” Is it meant that we have too much to do with the literature of fact—that what with our Blue Books and Statistics, our Mark-Lane Expresses, our Railway, our Mining, and our Building Journals, our Associations for the advancement of Science, our Sanitary Commissions, and our endless official reports on every conceivable subject, we have no time to read anything that is not designed primarily to teach us to make money or to take care of ourselves ? Is it meant that all iron has so eaten its way upon earth, that the sublimest and the sweetest hymnings of the bard cannot rouse in the breasts of the many one sympathetic emotion ?

In whichever direction the interpretation of the popular aphorism is to be found, we pronounce it without a misgiving, to be a rank and offensive fallacy. The smoke of a steam-vessel may sometimes obscure the sun from the loiterers upon deck : but all the steam in the world, or the material tendencies of which it is the representative, could as readily put out the sun as they could put out poetry. As long as there is sunshine ; as long as there are moon and stars ; sky and cloud ; green fields and sweet flowers ; the changing ocean, and the human heart which contains the likeness of them all, the few will sing and the many will listen. To us, indeed, this would seem to be a truism scarcely worth uttering, if it had not been in effect so often contradicted. We are utterly at a loss for a reason why it should be otherwise. There is room enough in the world both for Poetry and Steam. A man is not less likely to be endowed with “ the vision and the faculty divine,” or less likely to admire its manifestations in others, because his father goes up to London every day, with a “ season ticket” in his pocket, from the fair hills of Surrey or the green woods of Berkshire, instead of travelling in the Brixton or Clapham omnibus along the old high road ; or because he himself can rush from the smoke and din of the metropolis in a few hours,—

“ To see the children sporting on the shore,
And hear the mighty waters rolling evermore ;”

to bury himself deep in a mighty wood, or to ascend the rugged mountain side until he steep himself in the clouds. If there be anything in poetical education, anything in the effect of external influences upon the poetical temperament, surely the agency which brings a man most readily within their reach—within the reach of all the beauties and benignities of Nature—is to be regarded as one of the best aids to the development of the Divine faculty, and in no sense an obstruction to it. It is not one, indeed, of the least benefits which Steam has conferred upon the age, that it brings the country—sea and shore, hill and valley, wood and plain, the yellow corn-fields, the winding river, the mossy turf, the fragrant wild-flowers, the song of the lark, the tinkling of the sheep-bell—within the reach of the anxious town; almost as it were, to the very doors of dwellers in the heart of our cities.* Let those who talk about our iron roads marring the beauty of the country, because here and there may be seen an unsightly embankment, consider that there are thousands and thousands amongst us, who but for these iron roads, would never see the country at all. The Rail is, indeed, the great *open-sesame* of Nature. It is the key that unlocks her choicest treasures to the over-worked clerk and the toil-worn mechanic, and brings all sweet sounds and pleasant sights and fragrant scents within the reach of men who else would know of nothing that is not foul, unsightly, and obstreperous. What is this but to say that the Rail is a great teacher, educating both head and heart, preparing the few to utter, and the many to appreciate the utterances of Poetry.

All this may be conceded; and yet it may still, perhaps, be alleged that the age is essentially a prosaic one. An increasing addiction, it may be said, to the study of the exact sciences is as much an effect as a cause of all those great material improvements which are the growth and the characteristic of the civilisation of the nineteenth century. And it is assumed that Science and Poetry are the antagonists, not the help-meets and handmaids of each other. But most true is it of our civilisation, that—

“ Science and Poetry and Thought
Are its lamps—They make the lot
Of the dwellers in a cot
So serene they curse it not.”

* Coleridge said, apologetically,

“ I was reared

In the great city . . .

And saw nought lovely, but the sky and stars.”

Contrast this with Wordsworth's well-known lines,

“ The tall cliff

Was my delight, the sounding cataract

Haunted me like a passion,” &c. &c

They do not enter the cottage, or the mansion, to jostle and to wrestle with, but to aid, encourage, and to support each other. They may rarely find expression through the same oracular mouth-piece. But their influences upon the generation at large are conjoint and co-extensive.* The well-known, often quoted Baconian passage, setting forth that the same age which is fertile in men of action, as warriors and statesmen, is fertile also in men of thought, as poets and philosophers, might have both a more general and a more particular application. The age which produces giants of one kind produces giants of another. The same influences which operating upon one order of intelligence generate great mechanics, operating upon another will generate great poets. As with the body of an individual man, so with the body of men in the concrete, there is a sympathy between its different parts. Those salutary influences which strengthen one organ seldom fail to strengthen another. At all events, nothing can be more preposterous than to affirm that because one part thrives another must languish. The healthiness of the age manifests itself in the general development of intellectual power of all kinds. We see it alike—

“ In the steam-ship, in the railway, in the thoughts that shake mankind ;”

the progress of the nineteenth century is, in a word, *catholic*.

But after all, the best reply to the vulgar assertion, that the tendencies of the age are essentially prosaic, is to be found in the simple material fact of the large amount of poetry that is written, and the large amount that is read. It is true that much poetry, or much that presumes to call itself poetry, is written, but never read. The volumes of poetry which issue from the press, never to be read, but by friends and critics,—and by them sparingly—are past counting. Of this phenomenon there are two noticeable things to be said. Firstly, that very much of this unread poetry would once have been largely read. Unread poetry is not always unreadable poetry. Many a poet, doomed in this nineteenth century to taste all the bitterness of neglect, would at the close of the eighteenth have made for himself a great reputation. There have been worse versifiers included in editions of standard British poets than those, which week after week are now dismissed by our periodical critics in a few faint sentences of feeble praise. And, secondly, that poetry must, to a considerable number of people, be its own exceeding great reward, or so much would not be written for the mere pleasure of writing it. Every allowance being made for the deluding op-

* It may be remarked, too, that men of science were never more poetical, nor more scientific, than at the present time.

rations of hope—for all the excesses of a sanguine temperament—still the fact is mainly to be accounted for by a reference to the truth, that

“There is a pleasure in poetic pains,
Which none but poets know.”—

And if this pleasure be widely experienced, as by its results we know it to be, at the present time, the age can not be an unpoetical one. It matters not, in this view of the case, whether the poetry be good or bad. We speak here of those poetical yearnings which may find sufficient or insufficient utterance. Whatever may be their audible expression, whether in immortal music or wretched stutterings, there is a feeling of poetry at the source of it. The existence of the poetical temperament is indicated even by the profitless effort—the impotent desire. It is something even to aspire to be a poet.

It will, perhaps, be said, that if poetry, which would once have found many readers, now finds few or none, the age is, therefore, an unpoetical one. And so it would be, if, whilst rejecting this once tolerated mediocrity, we had nothing better to fall back upon. But the generation which can boast of Wordsworth and Shelley—Byron and Crabbe—Campbell and Rogers—Keats and Tennyson,—as its cotemporaries, has no need to betake itself to such mediocrity as was erst represented by Pomfret and Yalden. Has Mr. Tennyson, the most poetical of poets, any reason to complain of a paucity of readers? Has Elizabeth Barrett sung to a people who will not hear?

And, in the meanwhile, how fares it with our older bards? Are those who have sung worthily to a past generation forgotten or neglected by the present? There is no more cogent argument to be adduced, in denial of the assumption that the tendencies of the age are essentially prosaic, than the fact that there are, at the present time, *three* different editions of the standard British poets in course of serial publication. Would there be this ample supply if there were no adequate demand? Would Mr. Bell, Mr. Gilfillan, and Mr. Wilmot waste their fine minds in the strenuous idleness of editing generation after generation of English poets, only to supply lining for our trunks? Would Mr. Parker, or Mr. Routledge, or any other publisher, sink his capital in an unfathomable well of hopeless speculation? Would Mr. Cunningham and Mr. Murray fritter away their learning and their enterprises upon new editions of “Lives of the Poets,” and other kindred works, if we had ceased to delight in poetry? Would minor publishers be, as they are, continually on the alert to pounce, hawk-like, on expired copyrights of popular poets, if the tendencies of the age were essentially prosaic?

As we write, a prospectus is placed before us, announcing a forthcoming serial issue of Byron's poems, in penny numbers, under the auspices of some lawful pirate, who knows that the speculation will be a profitable one. Already have some of the earlier poems of Southey, Scott, and others, become common property—common property, which, in a prosaic age, no one would have thought worthy of the paper and print expended on its appropriation. Of the quantity of poetry that is *printed* in the present day, no doubt can be entertained. It may, therefore, without any violence, be assumed that much is *read*.

Indeed, if there were no other evidence of the tastes and feelings of the present generation than that afforded by the edition of the English Poets, for which we are now continually indebted to the talents and energies of Mr. Robert Bell, and Mr. J. W. Parker, we should be abundantly satisfied with the demonstration. The "Annotated Edition of the English Poets" promises to be the best ever presented to the public. The name, however, suggests to us *in limine*, what appears to us to be a defect in the design of the work. We have been used, when there was less need than now of the more comprehensive designation, to read of editions of the "*British Poets*." We gather from the different title now adopted, that it is the intention of Mr. Bell to exclude from his edition the whole of our *Scottish* poetry. It is not merely as North British Reviewers that we protest against this exclusiveness. In the advertisements to the edition, it is expressly stated, that "it will include the works of several poets entirely omitted from previous collections, especially those stores of lyrical and ballad poetry in which our literature is richer than that of any other country, and which, independently of their poetical claims, are peculiarly interesting as illustrations of historical events and national customs." Is the collection of these stories to stop short at the border? Is all the Ballad minstrelsy, the growth of those tracts of country which lie to the north of the Tweed, to be ignored in a great national collection like this? Is a work which must necessarily contain the writings of so many minor minstrels to give no sign of the existence of Robert Burns?

We shall hardly be suspected of any national partiality, in claiming for our principal northern bards due recognition, in a work which we believe will take its place not only in our own but in our children's and children's children's libraries, on both sides of the Border. "In the exercise of a strict principle of selection," say the projectors of the Annotated Edition, "this edition will be rendered *intrinsically* more valuable than any of its predecessors." It is only, indeed, upon the basis of the intrinsic excellence of the collection, that such a work as this can build

up its claims to an extensive and a lasting popularity. The editor of such a work must by no means be diverted from the duty of gathering together poetry of the highest order,—

"All such as manly and great souls produce,
Worthy to live, and of eternal use ;"

in search of what is merely curious and interesting from the extrinsic stamp of antiquarianism that is upon it. We should entertain no apprehension of such an editor as Mr. Bell falling into an error of this kind, even if he had not pledged himself to regard the intrinsic excellence of the poetry itself before every other consideration. That, in particular cases, there must always be some variance in the public taste is certain. It would be impossible for any editor, in a selection of poetical works to fill a hundred or more volumes, not to offend some prejudices and disappoint some predilections. There is a story told by Mr. Charles Butler to the effect that a party of gentlemen having agreed to write down the names of, we believe, the six most interesting books they had ever read, one name only appeared in every list. The book thus honoured was *Gil Blas*. There would not be this variance of opinion with regard to the intrinsic excellence of any number of British poets ; but it would be curious to see the lists which would be given in by a dozen intelligent men well-read in English literature, if they were invited to name the poets who, in their estimation, ought to be selected to fill a hundred volumes like those which are now before us. In respect, indeed, of this matter of selection, Mr. Bell must prepare himself to be charged with some errors both of commission and of omission. But we have little fear that starting, as he does, with the design of regarding intrinsic poetical excellence above all other considerations, he will go far wrong in respect of the general result.

"The edition now proposed," says Mr. Bell, "will be distinguished from all preceding editions in many important respects." When Cowper first examined Johnson's edition he wrote to Mr. Unwin, saying, "A few things I have met with, which if they had been burned the moment they were written, it would have been better for the author, and at least as well for his readers. There is not much of this, but a little is too much. I think it a pity the editor admitted any. The English muse would have lost no credit by the omission of such trash. Some of them appear to me to have a very disputable right to a place among the classics, and I am quite at a loss when I see them in such company to conjecture what is Dr. Johnson's idea or definition of classical merit. But if he inserts the poems of

some who can hardly be said to deserve such an honour, the purchaser will comfort himself with the hope that he will exclude none that do." The hope, however, was disappointed. The selection was the work of the booksellers, not of the editor,—and the former estimated the merits of a poet according to the existing amount of demand for his works. The great rival edition of the last century, known as "Bell's British Poets," was only so far better than Johnson's that it commenced at an earlier date, and included the works of Chaucer, Spencer, and Donne.*

Speaking of these two editions of the British Poets as of the only ones whose completeness renders them worthy of notice, Southey says, in his *Life of Cowper*, "I know not whether Johnson's edition was more accurate" (than Bell's, of whom Mr. Croker had said that the "inaccuracy of the press was very conspicuous,") "but this I know, that unless the press be carefully compared with the last edition of a book that has passed under the author's own eye, every new edition will introduce new corruptions into the text, and of the very worst kind, by the careless substitution of words, which, without making nonsense of the passage, alter its meaning or destroy its beauty." Of the truth of this there is no doubt. The probable evil of which Southey here speaks is a real one. The projectors of the edition now before us rightly observe, that "the necessity for a revised and carefully annotated edition of the English poets may be found in the fact that no such publication exists. The only collections we possess consist of naked and frequently imperfect texts, put forth without sufficient literary supervision." That an edition of the English poets, distinguished at the same time by a judicious selection of authors, a careful revision of the text, and in-

* "England, I believe," says Southey, in his *Life of Cowper*, "is the only country in which any general collection of its poets has been attempted. The first was brought forward by a noted bookseller, named John Bell. . . . He, in the year 1777, announced an edition of the poets of Great Britain, complete from Chaucer to Churchill. The more respectable of the London booksellers, regarding this as an invasion of what they called their literary property, (as by the custom of the trade it was considered to be,) resolved upon publishing a rival edition, which should have the advantage of an ostensible and competent editor, of a more correct text, and of including several authors, whose works being still copyright by law, could not be printed unless with the consent of those publishers in whom that right was vested. Dr. Johnson, as holding deservedly the highest rank among his contemporaries, was the person whom they selected to undertake this task, and to write the lives of the poets. And they also, like Bell, proposed to commence with Chaucer, and to include all the English poets down to their own time. The selection, however, was made, not by the editor, but by the booksellers, and they were directed in it by no other criterion than that of public opinion, as evinced in the demand for certain books. The poet whose works were not called for was dead to them. Departing, therefore, on that consideration, from their first intention, instead of commencing their collection with Chaucer they began with Cowley."

telligent annotation, was one of the greatest of our literary wants, will be readily admitted. This Mr. Robert Bell has undertaken to supply; whilst Mr. Parker performs his part of the compact in a manner to which the most fastidious cannot object, by issuing the edition in monthly volumes, which are a model of elegance, at so low a price, that the work, viewed in relation to the care and cost bestowed upon it, is one of the cheapest publications of the day.

As we write, some ten volumes of this edition have already appeared. It is too early a day to speak of the manner in which the duty of selection, generally, will be performed by Mr. Bell; but so far he has proceeded with judgment and discrimination. Mr. Bell's design is not merely to bring out the collected works of our principal English poets, weighing the claims of different aspirants to classic honours, as they have not been weighed by his predecessors, but to render his work also a complete collection of English *Poetry*. In other words, he purposes to embrace in his collection a large body of that scattered, and in some cases anonymous poetry, which is not less intrinsically excellent in itself, and has not had less influence upon the times, because it has not made the reputation, and is not historically associated with the name, of any particular man. Of the new insertions, the poems of John Oldham—a vigorous and a pungent satirist, well deserving resuscitation, may be accepted as a promising example; whilst the collection of *Songs of the Dramatists*,—the intrinsic excellence of which, however, we do not estimate quite so highly as Mr. Bell, is a pregnant instance of the careful, the conscientious, and the intelligent manner in which he is addressing himself to the performance of his difficult and responsible duty.

We have, indeed, a high opinion of the qualifications which Mr. Bell brings to his task. He is obviously a man of fine taste and cultivated mind, united with the steadier, and, we are afraid, rarer qualities, of laboriousness and conscientiousness. He is a discriminating, but at the same time a genial critic, a graceful writer, and an instructive commentator. A larger amount of cumbrous learning than he possesses would only be in his way. He is the reverse of a pedant; he has, no exclusive sympathies, no narrow prejudices of any kind. He can admire and appreciate writers of the most opposite character. Here and there it is probable that the editorship of some one particular poet might more advantageously be entrusted to some particular living writer whom we might name; but we know no one among our contemporaries more likely to do justice to an edition of English Poets as a whole.

The edition before us is emphatically an "Annotated" edition

of the English Poets. It in no small measure founds its claims to popular support upon the accuracy and copiousness of the annotations it contains. The illustrative matter is indeed ample. It is of two kinds, introductory and marginal. Judging by the volumes now before us, we have little hesitation in pronouncing an opinion favourable to the manner in which this important part of the editor's duty has been performed. The notes are numerous, but not too numerous. They discharge their proper functions; for they explain, they do not encumber the text. That here and there a wrong word may have crept in, or a stop may have been misplaced, or a note omitted where one is to be desired, is something more than a probability, it appears indeed to us to be a *necessity* in such a work. It would require, indeed, superhuman intelligence, and superhuman labour, wholly to prevent the occurrence of such mischances as these. That they seldom occur in a work of such extent, demanding so rare a combination of many qualities in the individual workman, is honourable to the ability, the care, and the conscientiousness of the editor. The "Annotated" edition of the English Poets would be the greatest literary wonder of the age if no errors were discernible in it.

To the assaults of that lowest order of criticism—the word-catching, which lives on syllables—a work of this kind is sure to be exposed. Every critic knows something, or thinks that he knows something, about Dryden and Pope, Goldsmith and Cowper. Many hold opinions of their own, perhaps have some peculiar critical tenets, any variance from which they regard as an unpardonable heresy. Mere difference of opinion constitutes, in their eyes, an offence. They treat as settled points what are often open questions; and whilst dogmatically commenting upon another's errors, not seldom illustrate their own. Doubtless they have a right to their opinions, and they have a right freely to express them. But a large portion of the censure which is passed by periodical critics, upon such works as this, is in reality a mere expression of a difference of opinion, and ought rather to be delivered in a suggestive than a dogmatic tone. The acrimony of rival commentators is, however, proverbial. The *ineptissime dixit* is still the favourite critical formula which expresses the offence of an editor who interprets an obscure passage after a fashion differing from that which finds favour in the eyes of his critic. But these Brunckian anonities are not creditable to our periodical literature. With the editor of such a work as this every literary man should make common cause; all who have our national literature at heart should endeavour to assist his labours, and to contribute something towards the completeness of his work.

The edition of Cowper now before us, included in three of Mr. Bell's annotated volumes, may be taken as a fair specimen of the manner in which he is discharging his important duties. We do not conceive that the "bard of Olney" is one to the consideration of whose writings, and the illustration of whose career, a mind so constituted as is the editor's, is likely to bring so large an amount of enthusiasm and sympathy as to other poets whom we could name. But on that very account, we believe, that in selecting the annotated Cowper for the text of the present paper, we are dealing fairly with the work as a whole. We have no doubt that better specimens of genial and careful editing will appear in the series. Indeed, we regard the annotated Dryden, with which the series was commenced, as, on the whole, a better specimen of editorial skill. But we cannot hesitate to declare that there is no existing edition of Cowper's Poems, which we so much care to possess, as that which is now before us. It has one great advantage over all others,—that the poems are arranged according to the date of their composition, so that we have a complete picture of the development of the poetical faculty in William Cowper, and a history of the intellectual activity of the bard, at different periods of his life, at once in the most authentic and the most interesting shape. The introductory notes explanatory of the circumstances under which the different poems were written, and the influences to which the poet was exposed at the time of their composition, impart a vitality to the collection, which, taking all the pieces together, carries the reader on from one to another, and raises within him, as he advances, those emotions of sympathy which are inspired by the perusal of a vivid autobiography. It is a common remark, that the history of a poet's life is to be found in his works. But his poems, when collected, are often arranged in so clumsy a manner, or on so false a system, that they throw no light at all upon the progress of his inner life, or the development of his genius. Mindful of this, Mr. Bell has for the first time printed Cowper's Poems in chronological order; and it is difficult to say how much their interest is enhanced by such an arrangement.*

In making frequent use of Cowper's unrivalled correspondence, the annotator has done wisely. But not less wisely in resisting

* "The Poems," says Mr. Bell, "are here printed, for the first time, in chronological order. It is believed that independently of other considerations, the interest connected with these pieces is much enhanced by this arrangement; especially in reference to the minor poems, which, being chiefly occasional, are to a great extent autobiographical. They enter into the history of Cowper's life; and a new light is thrown upon them, by exhibiting them in the order of the incidents to which they refer. The particular circumstances connected with their origin are explained in the introductions, and, wherever it is possible, in Cowper's own words, derived from his correspondence."

the temptation to a more liberal use of these materials for commentary. It would have been easy with a collection of Cowper's letters before him, for the editor to have multiplied note upon note. But such multiplication would have encumbered the text, and expanded the bulk of the work beyond convenient limits. It appears to us that we have just sufficient annotation, and no more, for a work that forms only a small component part of an extensive series.

The life of William Cowper has been written so often and so amply, that it was hardly to be expected that Mr. Bell should have much novel matter to introduce into the memoir which he has prefixed to the poems. It is a pleasant, a conscientious, and a reliable piece of writing; and with the introductory notes, affords a very complete picture of the life, the habits, and the character of the poet. There is a well-known peculiarity in the life of Cowper which distinguishes it from almost every other subject of biography. People are prone to ask, when a new biographer or new essayist enters upon it, "which side does he take?" The subject, indeed, has become a sort of literary battle-field—one, too, in which even larger interests than those of literature are concerned. The life of William Cowper has been written from very different points of view—one biographer regarding the views of another, to say the least of them, as dangerous heresies, and each having a large phalanx of supporters eager to condemn the work of his rival. Grimshawe wrote because he was not satisfied with Hayley; and Southey wrote because he was not satisfied with Grimshawe. Mr. Bell avoids both extremes. He is more moderate and candid than his predecessors. His sympathies are, perhaps, rather with Southey than with Grimshawe. But he has no theory to maintain. He treats of the results more than of the causes of Cowper's fearful maladies; and there is very little in his Memoir or his Notes to offend the prejudices of the most sensitive adherents of either party. If there be *anything*, it is rather in some casual expression, than in any studied assertion of opinion.

In truth it is a melancholy subject; but, after all, not so melancholy as some, it seems, would wish to make it. It would be the saddest thing of all to believe that so noble a mind was wrecked by that which is the very crown and perfection of human reason, and without which the intelligence of man, in its sublimest utterance, is but as a sounding brass and a tinkling cymbal. That William Cowper was, at certain periods of his life, the victim of some miserable spiritual delusions, is a painful and undeniable fact. But these delusions were not the cause, but the effect of the derangement under which he suffered. It

has often been said that "religion drove him mad." But religion never yet drove any man mad. Even Mr. Bell, of whose candour we have spoken approvingly, seems to have fallen into this old error. Speaking of the composition of the Olney Hymns, he says, "A devotional labour of this peculiar description, calling him back into the solitude of study and composition, to those *spiritual meditations which had formerly unsettled his reason*, was full of danger to Cowper." But spiritual meditations did not unsettle Cowper's mind. His mind would have been unsettled had he been an atheist and a blasphemer. The only difference would have been in the manifestations of his disease.

Had Cowper lived and suffered half-a-century later, the terrible malady which, during so many years of his life, overshadowed his reason, would, in all probability, never have been a mystery, never a subject of contention between rival biographers and controversial essayists. The seat of the disease, whether in the brain or the *viscera*, would have been discovered: and we should have heard nothing of spiritual meditations unsettling the reason of the unfortunate poet. As it is; we can only grope about in dim twilight. The solution, it is true, is very easy; reason and analogy favour it—but at the best it is only conjecture. More or less of doubt and obscurity must always envelop a subject upon which in these days modern science would in all probability have thrown a flood of light.

The extent to which the diseases of the body, both organic and functional, affect the mind, is every year becoming better and better understood. Men are often victims of the most horrible delusions under the influence of a mere temporary derangement of the organs of digestion. We have no doubt that medical experience could cite scores of cases of mental aberration, analogous with that of Cowper, attended with corresponding symptoms of physical disease. In general terms it is said, and said truthfully, of the poet, that from his childhood upwards, he was constitutionally of a morbid temperament. It does not appear that there was any hereditary tendency to which the origin of his malady can be assigned, but that it was constitutional is not to be doubted. "I have all my life," he frequently said in his letters, "been subject to a disorder of my spirits." This commenced at a very early period. We cannot quite follow Mr. Grimshawe in the inference which he draws from some of the well-known lines "On the receipt of my mother's picture out of Norfolk," to the effect that even before his mother's death Cowper was subject to depression of spirits. "That a morbid temperament," says the biographer,

"was the originating cause of his depression, is confirmed by an affecting passage in one of his poems:—

"My mother! when I learnt that thou wast dead,
 Say, wast thou conscious of the tears I shed?
 Hovered thy spirit o'er thy sorrowing son,
 Wretch even then, life's journey just begun.'"

But the meaning of this passage is not that Cowper was a "wretch" antecedently to the death of his mother, but that that event made him a wretch even at the beginning of "life's journey." His sorrows seem then to have commenced. There is nothing in the passage to lead us to the conclusion that they had commenced *before*.

He might truly date his sorrows from that melancholy epoch. It is not improbable, indeed, that he owed them all to his untimely bereavement. He was a child of a delicate organization, and he required, therefore, the gentlest treatment and the most watchful care. Instead of enjoying these advantages, he was subjected, in early childhood, to discipline of a very opposite nature. His father, the rector of Berkhamstead, on the death of Mrs. Cowper, sent William to school. The delicate, sensitive boy was "taken," as he said, "from the nursery, and from the immediate care of a most indulgent mother," and sent to "rough it," as best he might, among strangers.

Where Bedfordshire abuts into Hertfordshire, at a point of the great high road, between St. Albans and Dunstable, is a long straggling village or townlet, known by the name of Market Street.* Now that the North-Western Railway runs at no great distance, almost parallel with this road, the place has a wan, deserted, melancholy appearance. But once the now silent "Street" continually resounded with the smackings of the post-boy's whip, and the notes of the coachman's horn, and there was something of bustle and excitement, as there was at that time in many places, once the great arteries of our traffic, but now almost without a pulse of life. In this pulseless Market Street, there was a school kept by one Dr. Pitman; and thither, at the age of six, William Cowper, motherless and forlorn, was sent to "make his way," as it is called, against the "rolling sea" of birch and bullies.

And many a boy would have made his way against both. But poor little Cowper could not make his way at all. All the little

* Southey, in his *Life of Cowper*, has been at some pains to show the conflicting testimonies of different writers regarding the geographical position of Dr. Pitman's school—some having placed it in Bedfordshire, and some in Hertfordshire—and says truly enough, that the poet was only at *one* private school. A glance at the maps of the two counties might have assured him of the cause of the seeming discrepancy.

nerve which he carried with him to Market Street was battered out of him by a big boy, who seems to have made it his especial business to cow one who needed little discipline of any kind to bring him to a fitting state of subjection. "I had hardships of different kinds to conflict with," he wrote in after life with reference to this early training, "which I felt more sensibly in proportion to the tenderness with which I had been treated at home. But my chief affliction consisted in my being singled out from all the other boys by a lad about fifteen years of age, as a proper object on whom he might let loose the cruelty of his temper. I choose to forbear a particular recital of the many acts of barbarity with which he made it his business continually to persecute me; it will be sufficient to say, that he had by his savage treatment of me, inspired such a dread of his figure on my mind, that I well remember being afraid to lift up my eyes upon him, higher than his knees; and that I knew him by his shoe-buckles better than any other part of his dress." Commenting upon this passage, a portion of which Mr. Bell quotes in his introductory memoir, he observes, that to the brutality of this boy's character, and the general impression left upon Cowper's mind by the tyranny he had undergone at Dr. Pitman's, may be referred "the unfavourable opinion he entertained respecting schools, so forcibly expressed in the poem entitled *Tirocinium, or a Review of Schools*."

Of this there is no doubt: but might not something more have been added—might not something more have been referred to the tyranny of the big bully at Dr. Pitman's? It would be hardly possible for a child of delicate organization to undergo such treatment as little William Cowper was subjected to at the bad school in Market Street, without some abiding consequences affecting his physical or moral health—or both. What the precise nature of this treatment was does not appear. But no one knowing the many forms which school-boy cruelty assumes can doubt for a moment that it is quite sufficient to sow broad cast, in such a constitution as little Cowper's, the seeds of that melancholy disease which overshadowed so many of the best years of his life. We are sorry to say, that there are many cases on record of similar evil treatment, attended with effects of the same melancholy nature.

Not, however, that we regard such an instance of tyranny on the one side, and suffering on the other, as anything more than an exceptional case. There has been more than a common outcry of late against "fagging systems," "monitorial systems," and other kinds of schoolboy domination. But we have no disposition to swell the chorus. We suspect that there are not many men, whether educated at public or at private schools,

who are not willing to speak feelingly, affectionately, gratefully, of the kindness shewn towards them by older boys. There is something almost parental in the tender care and chivalrous protection, which we have seen extended to the young and helpless at the scholastic institutions which Cowper conceived to be nurseries of vice and hot-beds of oppression. When the result is different, it is for the most part to be attributed to the unfitness of the preceptor. In large public schools it may be difficult to exercise a direct influence over this branch of internal discipline; but in such establishments as Dr. Pitman's nothing can be easier. The master has nothing more to do, when a young and tender child is entrusted to his care, than to place him immediately under the protection of one of the elder boys. The more openly, *coram populo*, it is done the better. Such a trust is sure not to be betrayed. We have known the happiest results to attend such a practice as this. The chivalrous feelings of the elder boy are stimulated by such an appeal to his manliness. He is proud of the charge. He rejoices in the confidence reposed in him by his master; and he studies to prove himself worthy of it. He soon learns how much pleasanter it is to protect and to cherish than to domineer and to oppress; and he has his reward in the almost filial reverence and affection with which he is looked up to, and leant upon by his youthful clients.

Such kindly, judicious management as this might have saved poor Cowper. As it was, we can hardly doubt that during his residence at Dr. Pitman's the seeds of his terrible malady were sown. From the school in Market Street he was removed to the house of an oculist, where he remained for some time, under treatment for a disease of the eyes. A dreary time in all probability it was—with nothing strengthening or refreshing in the environments of his position, but much to enervate and depress. From this isolation he was thrown at once into the tumult of a public school. At the age of nine he went to Westminster. "At twelve or thirteen" he was "seized with the small-pox,"—"severely handled by the disease and in imminent danger." The virulence of the disorder cured the complaint in his eyes, but left behind what Cowper believed to be symptoms of consumption.* That it very much increased the irritability under

* In the Memoir of Cowper's early life, written by himself, these apprehensions of a consumptive habit are mentioned before the appearance of the small-pox. But the narrative of his school-days is briefly written in very general language, and the allusion to the consumptive symptoms may belong to any period of his Westminster career. As the attack of small-pox occurred at the age of twelve or thirteen; and he says, with reference to the "intimations of a consumptive habit," that he had skill enough to understand their meaning, they are more likely to have occurred after than before that age.

which he suffered, and still further weakened an already weakly constitution, is not to be questioned. At this time, he says, he was "struck with a lowness of spirits very uncommon at his age." As time advanced, however, his position at Westminster necessarily improved. The most reserved and retiring boy cannot spend nine years at a public school without acquiring some confidence in himself. As he grew older, and necessarily more respected by reason of his seniority, he became more self-possessed. He formed many friendships. He took part in the active recreations of the school. These social enjoyments exercised a salutary influence upon both his body and his mind. It does not appear that during the latter years of his residence at Westminster he was otherwise than healthy and happy.

At the age of eighteen he was "taken from Westminster, and, having spent about nine months at home, was sent to acquire the practice of the law with an attorney." On attaining his majority, he took a set of chambers in the Temple, and was "complete master of himself." Here, according to his own statement, he commenced "a rash and ruinous career of wickedness." Who could doubt the effect of dissipation upon his mitable constitution? Not long after his settlement in the Temple he was "struck with such a dejection of spirits, as none but they who have felt the same can have the least conception of." "Day and night," he said, "I was upon the rack, lying down in horror and rising up in despair." In this state he "continued near a twelve-month, when, having experienced the inefficacy of all human means, he at length betook himself to God in prayer." He had not, however, tried the effect of "all human means." Change of air and scene was subsequently recommended him, and he went to Southampton with a party of friends, and spent several months at that pleasant watering place. It need not be said that the change had a prodigious effect upon his health and his spirits. One clear, calm, sunshiny morning, as he sat on a hill-side, and looked down upon the beautiful expanse of sea and land beneath him, the burden which had so long oppressed him was suddenly removed, and he felt an elation of spirit so delicious that he could have wept for joy. This is no unwonted phenomenon. Nor is it a bit more strange that, finding himself so much better in health and lighter in mood, he should have ceased from those spiritual exercises to which he had betaken himself in a season of sickness and despondency. These mutations are so common, that they have passed into a proverb, contained in a somewhat irreverent distich, to which we need not more particularly allude.

He went back to town, gave himself up to society, and what he afterwards perhaps in somewhat overstrained language of

self-reproach, described as "an uninterrupted course of sinful indulgence. The kind of life, however, could not have had a very beneficial effect upon his nerves. He was disappointed, too, in his affections. He was tenderly attached to his cousin Theodora Cowper; and the passion was reciprocated.* But the prudent parents—

With a little hoard of maxims preaching down a daughter's heart—
forbade the union; and the cousins remained single unto death. Whether this "disappointment," which he made the subject of a poem, had any abiding effect upon his spirits, does not very clearly appear. Mr. Southey and Mr. Bell both think that it did not—quoting in confirmation of this opinion a Latin letter written subsequently to the failure of his suit, in which he speaks of "a lovely and beloved little girl" of sixteen, who had bewitched him at Greenwich. In our estimation, however, the argument based upon this passage is of no weight. The Latin letter appears to us to be nothing more than a bit of amusing badinage. Surely his account of the "*amabilis et amata puellula*," whose departure left behind so many "*lachrymas et suspiria*," was never meant to be received as the expression of a serious passion. Considering that he addressed his correspondent, a brother Templar, as "*Deliciæ et lepores mei*!" it is not very difficult to make allowance for the classical bombast wherein he speaks of his female friend. The Latin letter is curious and amusing; but it throws no light upon the real character of Cowper's love. His disappointment was, probably, one of many aggravating causes, which tended to increase his nervous irritability at this time; and we have little doubt, that if the issue had been different—if he had been united to a sensible, an amiable, and a sprightly woman, the clouds would not have gathered over him in such appalling density.

A crisis was now, indeed, rapidly approaching. Cowper's little patrimony was fast melting away under the influence of a life of continued idleness. In this emergency he remembered that he had some influential friends; and he bethought himself of the possibility of obtaining a situation under Government. The office of Clerk of the Journals of the House of Lords was in the gift of his kinsman, Major Cowper. The incumbent died, seemingly at an opportune moment; and about the same time the joint offices of reading clerk and clerk of the committees were vacated by resignation. Major Cowper, who was patentee of these appointments, made his cousin an offer of "the two most profitable places"—in other words, the joint office—and the latter thoughtlessly accepted it. On reflection, however, the idea of a public exhibition in the House of Lords quite overcame him,

and he sought permission to exchange his office for the less lucrative post of clerk of the journals. The exchange was effected, but the object was not obtained. Cowper was "bid to expect an examination at the bar of the House touching his sufficiency for the post he had taken." The thought of such an exhibition was so appalling, that in time it overthrew his reason.

There is nothing very astonishing in this. There are many men—men, too, in other respects not wanting in courage and confidence—who would rather forfeit a lucrative appointment than make a public exhibition of themselves, and stand an examination before such a tribunal as the House of Lords. It may be asked, then, why Cowper could not relieve his mind at once by throwing up the appointment? The answer is, that his abandonment of the office would have been a confession of incompetency, and that such a confession would have compromised his kinsman. He endeavoured, therefore, to qualify and to brace himself up for the threatened examination. It need not be said how hopeless are all such attempts. It would have been nothing short of a miracle if he had succeeded. Had his organization been far less delicate—had he never been subject to an excess of nervous irritability almost amounting to insanity—the experiment would have disastrously failed. As it was, the horror of the impending trial only increased upon him. The more he struggled to obtain light, the more hopeless was the darkness. It is unnecessary to enter into any details illustrative of this miserable period of Cowper's life. All the frightful circumstances are fully on record, as narrated by the poet himself. His excessive anxiety brought on a "nervous fever," which was somewhat allayed by a visit to Margate, where change of scene and cheerful company enabled him for a while to shake off his terrors. But on returning to London and the journals his old misery came back upon him, and he was more grievously tormented than before. He saw no escape from his agony, but madness or death. The former, as he thought, came too slowly, so he took refuge in the latter. He bought laudanum to poison himself. He went down to the Custom-House quay to drown himself. Finally, he hanged himself in his Chambers; but falling to the ground, just as strangulation was commencing, he was baffled in this last attempt. He seems then to have awakened to a sense of his guilt. But mind and body, thus cruelly exercised—thus rent and shattered and convulsed, were now giving way. It was impossible that they could much longer withstand this continued tension. "A numbness," he wrote in his own painful Memoir of these sad events, "seized upon the extremities of my body, and life seemed to retreat before it; my hands and feet became cold and stiff; a cold sweat stood upon my forehead;

my heart seemed at every pulse to beat its last, and my soul to cling to my lips as if on the very brink of departure. No convicted criminal ever feared death more, or was more afraid of dying. At eleven o'clock, my brother called upon me, and in about an hour after his arrival, that distemper of mind which I had so ardently wished for actually seized me. . . . A strange and horrible darkness fell upon me. If it were possible that a heavy blow could light upon the brain, without touching the skull, such was the sensation I felt."

He was conveyed to a private Asylum, kept at St. Albans by Dr. Nathaniel Cotton, an excellent and accomplished man. His mental alienation was of the most terrible, but not the most uncommon kind. After what had happened, it was almost a necessary consequence that his insanity should be of the gloomiest type, and that he should believe himself beyond the pale of salvation. Under the judicious treatment of Dr. Cotton, however, he slowly recovered. His terrible delusions began in time to clear away; and after eighteen months spent in the St. Albans Asylum, he was sufficiently restored to be removed to Huntingdon, where a lodging had been secured for him by his brother. His spirit was becoming every day more tranquil. He found solace in prayer. He attended divine service. His heart was full of unspeakable gratitude and joy. The goodness of God was the continual theme of his meditations. At Huntingdon he made the acquaintance of the Unwins. The family consisted of Mr. Unwin, a non-resident clergyman; his wife; a son, intended for holy orders; and a daughter, whom Cowper described as "rather handsome and genteel." How this acquaintance ripened into intimacy, and how Cowper became an inmate of the Unwins' house, is too well known to need recital. He seems at this period of his life to have been happy and cheerful. He took sufficient exercise—even riding upon horseback. He wrote, indeed, that he had "become a professed horseman;" and nothing was better calculated to strengthen his health and cheer his spirits. But a melancholy accident brought this peaceful interval of life to a close. Mr. Unwin was thrown from his horse and killed.

How the survivors—that is how Mrs. Unwin and Cowper determined not to forsake each other, but to dwell together and to administer to each other's wants, is known to all who are acquainted with even the merest outline of the poet's life. Of this curious compact, which Mr. Bell truly describes as "an exceptional case, not to be judged by ordinary standards," we purpose to offer no opinion, further than that, beautiful as was the constancy of the friendship which was so long maintained between them, the union was in some respects unfortunate in its results to both.

But the most unfortunate thing of all is the choice of their residence. They were attracted to Olney—a small townlet on the banks of the Ouse, in Buckinghamshire—by that remarkable man, Mr. Newton, who, then at the commencement of his distinguished evangelical career, was acting as curate of the parish. He recommended Mrs. Unwin to remove to Olney, and offered to secure a house for her. To this she readily assented, and her companion willingly ratified the choice.

So in the autumn of 1767, Cowper went to live at Olney. It would have been difficult to select, from one end of the kingdom to another, a more unfortunate place of residence for a nervous invalid. The house itself resembled a prison. The principal sitting room was over a cellar filled with water. The surrounding country was low, damp, miasmatic. During several months of the year it was almost impossible to go out of doors. There was no pleasant neighbourly society. All the influences, external and internal, to which he was subjected at this time, were enervating and depressing; and they abundantly fed his disease. A slow fever began gradually to consume both Cowper and his companion, but although they suffered miserably from its effects, it was long before they began thoroughly to understand the cause.

But they saw the whole extent of the mischief at last, as the following passages of a letter to Mrs. Unwin's son, clearly indicate. Need we look any further for the source of Cowper's sufferings at Olney?—

"When you first contemplated," he wrote, "the front of our abode, you were shocked. In your eyes it had the appearance of a prison; and you sighed at the thought that your mother lived in it. Your view of it was not only just, but prophetic. It had not only the aspect of a place built for the purposes of incarceration, but it has actually served that purpose through a long, long period, and we have been the prisoners. . . . Here we have no neighbourhood. . . . Here we have a bad air in winter, impregnated with the fishy-smelling fumes of the marsh miasma Here we are confined from September to March, and sometimes longer. . . . Both your mother's constitution and mine have suffered materially by such close and long confinement; and it is high time, unless we intend to retreat into the grave, that we should seek out a more wholesome residence."

In another letter, addressed to Mr. Newton, he wrote:—

"A fever of the slow and spirit-oppressing kind seems to belong to all except the natives, who have dwelt in Olney many years; and the natives have putrid fevers. Both they and we, I believe, are immediately indebted for our respective maladies to an atmosphere encumbered with raw vapours issuing from flooded meadows; and we

in particular, have fared the worse for sitting so often, and sometimes for weeks, over a cellar filled with water."

To the evil effects of climate and situation, far more than to the companionship of Mr. Newton, and to the pursuits into which he was led by that exemplary divine, are we to attribute the return of his malady. Mr. Bell, with the highest respect for Newton's character, is, however, of a different opinion.—

"The change to Olney," he says, "materially disturbed the tranquillity which Cowper had hitherto enjoyed, and which was so essential to his mental health. The calm daily prayers of Huntingdon, which shed a balm upon his spirit, that at once strengthened and composed him, were displaced by more frequent evangelical worship; prayer meetings were established in the parish, at which Cowper actually assisted; he was called upon to visit the sick; to pray by the bedside of the dying; to investigate the condition of the poor of a populous and extensive parish, and to administer to their wants, which he was enabled to do by a fund placed at his disposal by Mr. Thornton, a rich merchant; and drawn gradually into the duties of a spiritual adviser, he exchanged the quiet and the leisure of the last few years,—the cheerful conversation, the mid-day relaxation, the evening walk, for the onerous and agitating labours of a sort of lay curate to Mr. Newton. The effect of this change on a delicate organization, already shattered by a disease, which the slightest excitement, especially of a religious character, was likely to bring back, could not be otherwise than injurious."

To this we cannot but ask in reply, "Is it so?"

— Is it so, Festus?

He speaks so calmly and wisely—is it so?

Our own belief is, that visiting the poor and relieving their wants is anything but a dreary and depressing occupation; and that "quiet and leisure" were not precisely what Cowper most wanted. What he wanted was active occupation,—occupation both for body and mind; something, too, to draw him out of himself. The contemplation of such scenes as he witnessed in the houses of the poor, as Newton's lay curate, must have largely awakened that sympathy with others' sufferings, which more than anything else perhaps, saves a man from dwelling upon his own. We are not sure that if we were called upon to prescribe for the worst forms of hypochondriasis, we should not recommend the sufferer to fill his purse and go out to visit the poor. Such an occupation must in itself have been salutary even in Cowper's case.* But it was not sufficient to counteract

* We are entirely of opinion, however, that it was extremely injudicious to call upon Cowper—to whom a public exhibition of himself was, as he himself said, in any state, mortal poison—to take an active and outward part in the prayer

the other evil influences of which we have spoken. The marsh miasma of Olney was doing its sure work upon Cowper's irritable constitution. He was continually inhaling the slow poison of the place. A nervous fever was preying upon him. "Having suffered so much by nervous fevers myself," he wrote in 1776, "I know how to congratulate Ashley on his recovery. Other distempers only batter the walls; but *they* creep silently into the citadel, and put the garrison to the sword." It need not be explained to the dullest reader, that the citadel here spoken of is the head,—*ars et forme facies*.—and that the garrison is the brain, or the reason. We have here therefore a distinct avowal of Cowper's opinion that his reason was destroyed by the operation of nervous fever; and we have already cited an equally distinct recognition of the fact, that his nervous fever was mainly occasioned by the unhealthiness of the climate of Olney. The same atmospheric poison acts differently upon different constitutions. It has, however, one general rule of action. It attacks the weakest place. It lodges itself wherever there is a predisposition to receive it. We need take no trouble to explain why the fever which in the poorer class of inhabitants assumed a putrid type, should in one so organized as William Cowper attack the nerves and affect the brain.

When he wrote about "the nervous fever" creeping silently into the citadel, he had been nine years resident at Olney, the three last of which had been passed under the influence of the most terrible depression. Still for three years longer he continued under the same influence, but considerably mitigated by time. In 1776 the fury of the storm had expended itself, and in 1779 it had well-nigh blown over. He said afterwards, that he did not quite lose his senses, but that he lost the power of exercising them. "I could return," he said, "a rational answer to a difficult question; but a question was necessary, or I never spoke at all. This state of mind was accompanied, as I suppose it to be in most instances of the kind, with misapprehensions of things and persons, which made me a very untractable patient. I believed that everybody hated me, and that Mrs. Unwin hated me most of all; was convinced that all my food was poisoned, together with ten thousand vagaries of the same stamp." There is nothing here that may not be—indeed, that has not been—clearly traced to derangement of the physical constitution. But the disease was suffered to make progress under a mistaken sense of its import, until the enemy could with

meetings of Olney. Mr. Greathead, who preached his funeral sermon, said, "I have heard him say, that when expected to take the lead in this social worship, his mind was always greatly agitated for some hours preceding."

difficulty be dislodged. Southey says that Mr. Newton and Mrs. Unwin, being clearly of opinion that their poor friend was torn by an unclean spirit, would not for many months seek that professional aid which before had been exercised with such salutary results.

During the season of his slow recovery, he amused himself by tanning hares, carpentering, gardening, and painting landscapes; and when, in 1780, his mind seemed to have recovered its original strength, it was suggested to him that he would do well to cultivate his poetical powers. He frequently wrote light occasional pieces; and now he was stimulated to more sustained efforts by the affectionate solicitude of his friends. They sent him to court the muses not in search of fame, but of health.

Suffering, indeed, made him a poet, as it has made many others. "Encompassed by the midnight of absolute despair," he wrote long afterwards to Mr. Newton, "and a thousand times filled with unspeakable horror, I first commenced as an author. Distress drove me to it; and the impossibility of subsisting without some employment still recommends it." But there was something wanted to give effect to the proposed remedy. Cowper himself well knew what it was. In the poem of "Retirement," he significantly says:

"Virtuous and faithful Heberden, whose skill
Attempts no task it cannot well fulfil,
Gives melancholy up to Nature's care,
And sends the patient into purer air."

Cowper ought to have been removed from Olney on the first appearance of his malady. But he remained there, throughout nineteen long years—at the end of which it had become intolerable to him. It is probable, however, that he would not have had sufficient energy and resolution to effect a change, but for a circumstance which in the course of the year 1786 exercised a happy influence over the remainder of his life. In that year his cousin Lady Hesketh, with whom he had been in a familiar and affectionate correspondence for a quarter of a century, arrived, on a visit, at Olney. She brought an admirable physician with her, in the shape of a carriage and horses; and Cowper, who had been, for many years, literally incarcerated in a dreary prison-house, with a companion who, like himself, was wasting away under the destroying influences to which they were both subjected at Olney, was prevailed upon to accompany his cousin on her pleasant rural drives, and was wonderfully refreshed by the recreation. She was in all respects, too, a most delightful companion. Her presence made sunshine in that shady place on the banks of the Ouse. Even

in his letters to Mr. Newton, Cowper could not refrain from chanting her praises in a full swell of gratitude:

"Lady Hesketh," wrote the poet, "by her affectionate behaviour, the cheerfulness of her conversation, and the constant sweetness of her temper, has cheered us both, and Mrs. Unwin not less than me. By her help we get change of air and scene, though still resident at Olney, and by her means have intercourse with some families in this country with whom but for her we could never have been acquainted. Her presence here would at any time, even in my happiest days, have been a comfort to me, but in the present day I am doubly sensible of its value. She leaves nothing unsaid which endues, that she thinks will be conducive to our welfare, and so far as she is concerned, I have nothing to wish, but that she should be ever so long a father in mercy to myself, then I should be thankful."

Lady Hesketh saw, at the first glance, the fatal mistake that had been committed, when Cowper and Mrs. Unwin were prevailed upon, not by their residence in the Olney Bastile. They needed little persuasion or encouragement to induce them to remove to a more cheerful abode, though without *any*, they would probably have continued to stagnate in the old place. Lady Hesketh's warning were quite sufficient to fix the resolution of both. In the course of June, Cowper wrote to his old friend Joseph Hill—the "honest man close buttoned to the chin," of the well-known "Epistle,"—that he had determined to leave his chains. "Olney," he said, "will not be much longer the place of our habitation. At a village two miles distant (Weston Underwood) we have hired a house of Mr. Throckmorton It is situated very near to our most agreeable landlord and his agreeable pleasure grounds. In him and his wife we shall find such companions as will always make the time pass pleasantly whilst they are in the country, and his grounds will afford us good air and walking-room in the winter—two advantages which we have not enjoyed at Olney, where I have no neighbours with whom I can converse, and where seven months in the year I have been imprisoned by dirty and impassable ways, till both my health and Mrs. Unwin's have suffered materially." Many passages of similar import might be drawn from Cowper's letters; but after what we have already written, we need not pile up evidence to prove, that when the Olney house was selected for his residence, it was written down against him that he should never again enjoy a continuance of physical or mental health.

In November 1786, Cowper and Mrs. Unwin removed themselves to Weston. He was charmed with his new abode. He wrote playfully that the change was as great as "from St. Giles

to Grosvenor Square." *But it had come too late.* Those nineteen dreary years in the Olney prison-house had done their sure work both upon Cowper and upon Mrs. Unwin. He had been fast subsiding again into a state of depression, when Lady Hesketh had arrived to cheer him; but although her presence delayed the attack, she could not wholly avert it; and he had not been many weeks settled at Weston when the fever which he had brought with him from Olney began to assert itself, and with it came his old despondency. The evil was perhaps precipitated by a calamity which befell the two invalids at this time. "Hardly," he wrote, "had we begun to enjoy the change, when the death of Mrs. Unwin's son cast a gloom upon every thing." This exemplary man was fondly loved by Cowper, and his unexpected death was a heavy blow to him. It fell, too, at an inopportune moment, and, doubtless, evolved the crisis which otherwise change of scene might have retarded for a time. As the year commenced he felt the fever creeping in his veins. "I have had a little nervous fever, my dear," he wrote to Lady Hesketh, "that has somewhat abridged my sleep." A few days afterwards, writing to Mr. Newton, he said with reference to another's trials, "I have no doubt it is distemper. But distresses of mind that are occasioned by distemper, are the most difficult of all to deal with." He knew this but too well, for it was his own case. To Lady Hesketh, too, he wrote again on the 18th of January, "My fever is not yet gone; but sometimes seems to leave me. It is altogether of the nervous kind, and attended now and then with much dejection." The ink with which this was written was scarcely dry, when the storm burst over him in all its fury. A terrible darkness fell upon him, which continued throughout many months. His agony was so extreme, that again he sought refuge in death. But for the timely interposition of Mrs. Unwin, he would have been laid in the suicide's grave.

In July he suddenly awoke, as it were, from a terrible dream, and returned to his usual avocations. He devoted himself to his translation of Homer, and seems to have fallen into the error of applying himself too closely to study. He took little exercise, and seldom went beyond the limits of his own and his neighbour's grounds. "I stay much at home," he wrote, "and have not travelled twenty miles from this place and its environs more than once these twenty years." His health and his spirits were subject to considerable fluctuations. Even the improved situation of Weston could not dislodge the enemy, which for nearly twenty years had been creeping into the "citadel." Nor was Mrs. Unwin more fortunate. Her health had long utterly failed her. Her faculties were becom-

ing clouded. Extraordinary delusions possessed them both. At last, in the winter of 1791, the poor lady was stricken down by paralysis; and from that time, though every effort was made to rally her, and she even consented to accompany Cowper on a visit to Hayley, at Eastham, in Sussex, she continued to grow more and more imbecile, until it was plain that she was totally incompetent to manage the affairs of her household. It need not be said that the melancholy sight of his poor friend's infirmity, which was continually before him, had the worst possible effect on the poet's mind. In 1794 he was in a pitiable state. He refused medicine; he refused food. He was continually pacing his room, backwards and forwards, like a beast in a cage. Dr. Willis was sent for and did all that his unequalled skill could accomplish. But such interposition was too late. Lady Hesketh attended on him, and ministered to his wants with the most sisterly assiduity, but nothing could raise him from the hopeless dejection in which he was sunk.

In the summer of 1795 it had become obviously necessary to make some new arrangements for the disposal of the two sufferers; and it happened fortunately that at this time Dr. Johnson of North Tuddenham, a young relative of Cowper's, who united with a sound judgment the highest rectitude of conduct and the most unfailing kindness of heart, expressed his eagerness to take charge of them; and they were quietly removed to Norfolk. He watched over their declining years as though they had been his parents. Nothing could have been more judicious than the treatment to which Cowper was subjected, but, as we have said before, it was too late. Such transient signs of revival as manifested themselves in Norfolk only indicated what might have been done at an earlier stage. In December 1796, Mrs. Unwin died. Cowper being taken to see the corpse, burst out into a passionate exclamation of sorrow, but left the sentence unfinished, and never spoke of his friend again.

He survived her more than three years, but they were years of suffering, bodily and mental. The low fever which had clung so tormentingly to him was now preying on his very vitals. "The process of digestion," we are told, "never passed regularly in his frame;" and "medicine had no influence upon his complaint." The only marvel is, that thus hopelessly prostrated he so long continued to live. "Frequent change of place, and the magnificence of marine scenery," even then, however, "produced a little relief to his depressed spirit." The remedy, indeed, was being applied when he could no longer profit by it. In 1799, his corporeal strength was rapidly declining, and early in the following year it was plain that his dissolution was close at hand. As his end approached he does not seem to have gained serenity of mind. The terrible delusions which had so long

clung to him were not now to be shaken off. He expressed, indeed, no hope to the last; but when, on the 25th of April, 1800, his soul was released from its shattered tenement, the affectionate relative who had so tenderly watched over the last dark years of the poet, thought that he could see on the face of William Cowper "an expression of calmness and composure, mingled, as it were, with holy surprise."

Painful as is this story, it is not an unintelligible one; we believe, indeed, that it is not an uncommon one. The celebrity of the poet has imparted to it an interest and a notoriety, which do not belong to others, presenting the same features to the eye of the professional observer. These nineteen years at Olney, viewed in connexion with the melancholy antecedents of Cowper's life, were sufficient to account for anything that occurred after he took up his abode in that dreary Bastille on the banks of the Ouse. A dry, bracing air, cheerful society, regular exercise, (if possible on horseback,) occasional change of scene, and good medical advice, might have restored him to health and happiness. This is no vague conjecture. He had himself the strongest possible conviction that these were the remedies he required; and whenever the effect of any one of them was accidentally tried, he greatly improved both in health and spirits. As it was, with everything to poison the body and depress the mind, mind and body were continually acting reciprocally one upon the other, until disease was so firmly established in both, that all hope of cure was at an end.

That one—the chief, indeed, of Cowper's delusions, should be an insurmountable belief that God had turned away His face from him, and that the Redeemer had not died for him, seems to be an almost necessary result of the miserable circumstances which preceded his first attack of madness. So profound, indeed, was his mental darkness—so complete the entanglement and confusion of his ideas, during these awful periods of insanity—that he believed that God had totally and finally rejected him because he had *not* committed suicide. He read everything backward; he saw everywhere the reverse side of things. To base any theory upon these grotesque figments of a disordered brain were clearly absurd. The greatest of our female poetesses * has beautifully and aptly compared this aberration with the wanderings of a fever-stricken child, who calls aloud for his mother, whilst her kind eyes are bent upon him:—

"Like a sick child that knoweth not his mother whilst she blesses,
And drops upon his burning brow the coolness of her kisses;
That turns his fevered eyes around, 'My mother—where's my mother?'
As if such tender words and looks could come from any other."

* Mrs. Browning.

Indeed, Cowper's despair was but a fever-born delusion; in his healthier hours his religion was eminently cheerful:—

"The fever gone with leaps of heart, he sees her bending o'er him;
Her face all pale from watchful love, the unwearied love she bore him!
Thus woke the poet from the dream his life's long fever gave him,
Beneath those deep pathetic eyes which closed in death to save him.

Thus? oh, not thus! no type of earth could image that awaking,
Wherein he scarcely heard the chant of seraphs round him breaking,
Or felt the new immortal throb of soul from body parted;
But felt those eyes alone, and knew, '*My Saviour!* not deserted!'"

He knew, indeed, that he was "not deserted." When the enemy was not "in the citadel" he was hopeful and assured. He lived in a state of habitual thankfulness. His familiar letters sparkle with playful humour. They are the pleasantest and the most genial ever written. They indicate, for the most part, a mind at peace with itself, and a heart full of tenderness towards others. With few exceptions, they declare in every sentence the gentle loveable nature, the cheerful philosophy, and the sound good sense of the poet. For it was Cowper's hard fate, when the malady was upon him, to belie himself in every essential particular. A morbid disposition obscured all the realities of his natural self. The loving grateful heart, the clear reason, the hopeful piety, all yielded to the assaults of the insidious fever; and he became, under its domineering influence, morose, fanciful, desponding—mistrustful alike of God and of man.

How complete the inversion was is apparent to every reader, who studies in immediate connexion with each other the life and the works of William Cowper. If there be one characteristic of his poetry more remarkable than any other, it is the sound good sense which informs it. He is, indeed, the sanest of our poets. Of "fine frenzy" in his writings there is little or none. Perhaps there is no collection in the language less likely, on its own merits, to be attributed to a "mad poet." He was of a school the very antithesis of the spasmodic. It is the rationality, indeed, of Cowper's poems, which has rendered them so acceptable to the people of England. He had seen little of men, and was not very largely acquainted with books. But his strong natural sense, and his extraordinary keenness of observation, enabled him to triumph over these deficiencies, and there are many passages in his longer poems which have all the appearance of having been written by a well-read man of the world.

It was said by William Hazlitt, we believe, that there are "only three books worth looking into for a quotation—the Old Testament, Shakspeare, and Wordsworth's *Excursion*." To these might certainly have been added, "The Poems of William

Cowper." With the single exception of Shakspeare, there is no poet more frequently quoted by his countrymen. He is, perhaps, more quoted than read. Many brief passages in his writings have become "familiar as household words," and are passed about from one mouth to another by men who cannot trace the lines or couplets to their true paternity. It is the simple intelligible truth of these passages that fixes them so firmly on the popular memory, and renders them so easy of reproduction. If they were more poetical, or more profound, they would be less current amongst us.

The sustained popularity of Cowper's writings is a fact very creditable to Englishmen. Within the last few months three new and handsome editions of his poems have been contemporaneously appearing. He is emphatically an English poet; he represents, indeed, the best side of the English character; but he is entirely and exclusively English. No other country could have produced such a poet; and in no other country would he have been equally popular. We take him to our hearths fearlessly, trustfully. There is scarcely a library in the kingdom containing a hundred volumes in which Cowper has no place. His poems are the earliest which English children learn by rote. They are food alike for tender nurslings and for strong men. We may not be very enthusiastic over them. They do not excite us to any prodigious heights of admiration,—perhaps they do not often stir any profound depths of emotion within us; but we always approve, we always trust, we always sympathize with, we always love, we are always grateful to the poet. It is the proud distinction of William Cowper that he never led any man astray—that no one ever studied his writings without being wiser and better for the study—that no English parent in his sound senses ever hesitated, or ever will hesitate, to place Cowper's poems in the hands of his child.

We are thankful that there is a sufficiency of good healthy English taste and feeling amongst us to keep alive the popularity of such writers as William Cowper. We are not unmindful of the claims of poets of another class. They write under different influences, and they have their reward. Even the writers of what is now called the "spasmodic school" are entitled to some consideration, and may be too severely handled. But let what schools may rise and fall—come jauntily into fashion for a little while, to be hooted down as quickly—the good English thought and English diction of William Cowper will still keep their place amongst us; and still as we speak reverently and affectionately of him who did so much to swell the happiness of others, but could never secure his own, it will be our boast that the most English of our poets was emphatically the most Christian.

- ART. VIII.—1. *Russia and Europe; or the Probable Consequences of the Present War.* By COUNT VALERIAN KRASINSKI. London, 1854.
2. *Russia, Germany, and the Eastern Question.* By GUSTAV DIEZEL. Translated from the German by FREDERICA ROWAN. London, 1854.
3. *Del Dovere d'agire. Al Partito Nazionale.* Par GUISEPPE MAZZINI. London, 1854.
4. *La Russie et l'Angleterre.* Par BRUNO BAUER. Charlottenburg, 1854.

IT is now nine months since we addressed our readers on the position and probable development of what was termed "The Eastern Question." At that period every thing was in confusion and uncertainty. Hostilities had begun between Turkey and Russia, but it was as yet quite undecided whether any other powers would take part in the conflict. Every one prepared for war, but every one spoke of and hoped for peace. Diplomats were more busily employed than soldiers. Protocols and Remonstrances were flying to and fro, and couriers crossed each other in every direction, bearing propositions and counter-propositions, out of some one of which it was confidently anticipated that the basis of a pacific arrangement would emerge. The Four Powers were as yet acting ostensibly in concert; but it was still uncertain whether England and France would proceed to a declaration of war, and whether, if they did, Austria and Prussia would join them, or remain neuter, or pronounce against them. The first brief autumn campaign was over; and though no decisive or general action had been fought, success on the whole had unquestionably declared in favour of Russia; but few ventured to augur with any great sanguineness from this auspicious commencement of an unequal strife. So little did any of the statesmen of Europe believe in the power of Turkey to maintain any prolonged contest with her colossal opponent, and so anxious were all to prevent the flames of war from spreading, that the most moderate concessions on the part of the Czar would have been accepted by the Four Extinguishers, and been eagerly urged, if not forced, upon the weaker combatant.

We then pointed out that,—although it was far too early to predict the fortunes of the war, and though the results of the first campaign afforded us no sufficient data on which to anticipate the ultimate success of the Sultan when his rival should have brought all his resources to bear upon the contest,—yet that there were elements of vitality in the Ottoman Empire,

and elements of weakness in the Muscovite Empire, which had never hitherto been duly estimated. We enumerated some of these last; we reminded our readers that the great conquests of Russia had been effected by diplomacy, and not by actual fighting; and that these conquests were *annexed* merely, not assimilated. "All these things considered," we observed, "it is by no means unlikely that, if the present war continues, she may turn out to have been a gigantic imposture,—that, when tried by the severities of a real struggle, she will prove weak to a degree which will astonish those whom she has so long duped and dazzled; weak from her unwieldy magnitude—weak from her barbarous tariffs and restrictive policy—weak from the inherent inadequacy of her one-eyed despotism—weak from the rottenness of her internal administration—weak from the suppressed hatreds she has accumulated round her—weak in every thing save her consummate skill in simulating strength."

These surmises, which at the time they were uttered were considered somewhat wild and rash, have been not only justified, but surpassed by the event. The feebleness everywhere displayed by Russia, both in attack and defence, has been matter of ceaseless astonishment. Only in Asia has she been even partially successful, and there her successes have been attributable solely to the unheard of incapacity of the Generals opposed to her; while they have been at best partial, and latterly have been cancelled by the signal reverses which Schamyl has inflicted on Muscovite arms. On the Danube Russia failed in nearly all her enterprises: she failed before Kalafat; she failed at Csitate; she failed in Transylvania; she was obliged to abandon all her acquisitions, and to retrace all her steps; and the termination of the campaign was to have seen her victorious at Constantinople, *but* seen her vanquished, and in full retreat behind the Pruth. And this result has been brought about without a single blow having been struck at that seat of war by any troops but those of the Sultan. The Austrian army did not, and would not, enter the Principalities till the Russian forces had definitively withdrawn; and the Anglo-French army never came in sight of the enemy. We do not of course mean to say that the presence of the allied troops in Roumelia had not a great deal to do with the precipitate retirement of Prince Gortschakoff across the Danube; and that the menacing and semi-hostile attitude of the Austrians had not a great deal to do with his retirement across the Pruth. But it was the almost uniform success of the Turks that kept their enemies at bay till the allies were approaching the scene of action; it was the victories at Kalafat and Oltenitza which enabled those allies to proceed with such wise and leisurely caution; and it was the masterly

defence of Silistria, in which Turks only were engaged, which at once compelled the Russians to resign all hopes of an advancing movement, and emboldened the tentative and timid Austrians to "occupy" an evacuated nest. If Silistria had fallen, the Russians would have possessed a line of fortresses in which they might probably enough have made head against their foe by the powerful assistance of cholera and ague; and in that case they would have had no enemy in their rear, for Austria is the enemy only of the vanquished;—while the Anglo-French troops, in place of conquering the Crimea, would have had to reconquer Bulgaria, when they might have fallen victims by thousands to the pestilential malaria and the fearful heat.

The same unexpected exhibition of weakness was displayed elsewhere. Cronstadt remains unassailed, because it is impossible to take a fortress which cannot be approached. No one of course imagined that the Russian ships would venture out to sea in the face of an English fleet anxious to attack them; no one expected that Bomarsund would be able to hold out against the efforts of the allies; but neither did any one suppose that it would be taken in a few hours, and with scarcely any effective resistance. As soon as it was known that the expedition to the Crimea was resolved upon, we took for granted that the Crimea would be conquered; and that Sebastopol must ultimately fall into our hands; but assuredly no one anticipated that, after months of notice, our armies would have been suffered to stand without the faintest attempt at opposition; that our first victory would have been so signal, so decisive, and so rapid; or that the greatest fortified harbour of Russia—probably the strongest in the world—would be taken on such easy terms, or in so brief a period. Sanguine as we were, we confess that the feebleness of Muscovite resistance has been a surprise to us. We remarked, nearly a year ago, that merely to ascertain whether the strength of the Czar was the strength of the people, or only of the bulk, might be well worth the expense and danger of a war; but we certainly had no idea that the information could be obtained in so clear a manner and at so slight a cost. Henceforth the prestige of Russian military power is gone. Europe need dread her arms no more, and though her dominancy in all respects is to be resisted against her opponents, unsupported by a conviction of the inviolability of the discipline, is deprived of its most formidable weapon. The Czar is no longer the great conqueror of Europe, and of Asia, and has been beaten on all hands. He has not only been beaten and beaten early, by the French and English, but he has been beaten by the Turks and the Circassians, Marzouk, and by Arabs, now, moreover, more narrowly but more completely than ever before, but certainly,

by the Ottomans in 1829, and how completely the treaty of Adrianople was the fruit of a mistake.

This is the first great benefit which Europe has derived from that war in the East, which, a year ago, was so much feared by all. But other beneficial consequences, scarcely less signal, have followed from it. When we wrote in February last, it was still a matter of uncertainty whether France and Great Britain would take an active part in the war; whether, as heretofore, they would confine themselves to supporting their ally by protests and remonstrances, or whether they would venture boldly and vigorously into the strife. There can be no doubt that, at that period, it was the desire of the statesmen of both countries to avoid actual hostilities. They earnestly wished to do so; they still believed it possible to do so. If Nicholas would have offered promptly any *bonâ fide* concessions, they would have been eagerly grasped at by our Government. Our people were willing to go to war; our rulers were not. But for the decided language of the Press, and the marked tone of feeling in the country, there is reason to fear that an unworthy and hollow compromise might have been patched up. Happily the Czar, proud, obstinate, and exceedingly irritated by a degree of opposition and of failure to which he was wholly unaccustomed, spurned the bridge of gold which our ministers were anxious to build for him; and left them no alternative but that of losing at once honour and popularity, or of following the national impulse, and declaring war against him. This was done on the 29th of March; and for the first time, in the history of the modern world, France and England found themselves side by side in a great European war. This fact alone was almost worth the entire imbroglio, with all its embarrassments and all its expenditure. It was precisely the alliance which the Czar had found it impossible to believe in. It was precisely the one which his whole previous policy had been directed to prevent. It was precisely the one which was most fatal to his schemes, and which he should have forestalled at any cost and by any concession. It is precisely the alliance which reduces him to comparative political insignificance. But more than this:—On a cordial union between these two advanced nations depend the peace of Europe, the progress of civilisation, the interests of freedom. They differ in many of their ideas, and in some of their objects; but they have few interests that clash, and many purposes and aims that coincide. In literature, in material advance, in wealth, in the science of administration, they stand far ahead of the rest of Europe; and, together, they may make of Europe what they please. If they remain cordially united, and embrace in one wide alliance all the other liberal and improving States of Europe,—Sweden,

Switzerland, Belgium, Piedmont—the future is fraught with the brightest certainty of progress. Prussia will not long suffer her king to drag her through disgrace; Austria cannot much longer act with the mediæval atrocity which has hitherto distinguished her administration; Italian governments will be shamed or compelled into decency, if not into humanity; and Russia may gnash her teeth in fury against blessings which she will be powerless to prevent. Now nothing so closely comports friendship as fighting against a common foe. Nothing so binds together the noble and the brave as hardships undergone in common, enterprises undertaken in common, magnificent achievements wrought in common, great deeds of heroism performed in common. Nothing so obliterates all that is painful in the recollection of past defeats, as glorious battles in which the victors and the vanquished of former days fight side by side. We firmly believe that two campaigns, of which the English and French have shared together the trophies and the toils, and in which they had daily opportunities of estimating each other's amiable and solid qualities, and been indebted for safety and success to each other's courage, skill, and honourable friendship, will do more to ensure the permanence and depth of the *entente cordiale*, than generations of the most elaborate policy or the most forbearing statesmanship.

- Again. We have to thank the Czar not only for the hearty alliance of France, and for all the blessings which we believe will flow from it, but for the opportunity which he has given to Great Britain of showing the prompt and mighty strength which she can put forth on an emergency. Of late years it was supposed that our wealth and prosperity had made us indolent and easy, if not timid. It was fancied abroad, and loudly proclaimed at home, that we had suffered our army and navy to fall into a discreditable state of inefficiency; that economy was the order of the day; that our people would not tolerate heavy taxation to maintain large forces which we never used; in short, that we never expected or intended to fight again; that we were ready to bear an inordinate amount of bullying, and that possibly, after a few years more of undisturbed somnolence, we should fall an easy victim to any daring antagonist, and any vigorous *coup-de-main*. There was some truth in these surmises. There *was* some danger that we might become, not too cowardly, but too lazy, to fight when we ought; that we should get a habit of calculating too nicely whether the object in question was worth fighting for; and that we should grudge the cost of keeping up a complicated fire-engine, when no fire had been heard of in our neighbourhood for years. Happily some parties at home, by pointing out the dangers to which we were

exposed, and the inadequacy of our preparations to meet what, if not probable, was assuredly not impossible, had already done something to arouse the lion from his lethargy. But, if Nicholas had been less rash or less stubborn, we never should have been stirred into activity sufficient to afford the world the astounding spectacle it saw in April and May. In a few weeks' time we sent forth the two largest and best manned fleets that ever left our shores, and beyond all parallel the best equipped army that ever sailed from England on any expedition—both fleet and army provided with every new invention of science to which experience or judgment had given their sanction.* In 1852 and 1853, there were doubts whether we had either ships or men sufficient to defend our own shores against a sudden descent. In 1854, we sent to an ally both land and naval auxiliary forces, which have checkmated, conquered, and despoiled his colossal antagonist. All this, too, was done rapidly, silently, and easily;—regiments were recruited and ships were manned without difficulty; volunteers flocked both to the militia and the navy; the moment there was a prospect of active service, men were forthcoming in ample numbers, and neither conscription nor impressment had to be resorted to. This magnificent spectacle will not be lost either on Europe, or America, or on ourselves. Already a great change of tone on all hands is observable. We shall not again be harassed by sinister whispers of invasion—our foes have had a forewarning with what sort of a people they will have to deal;—our transatlantic cousins will become a trifle less insolent and overbearing when they find that the fleet which “summers” in the Baltic, can without cost or effort, “winter” in the gulf of Mexico;—and our statesmen will not again need to speak with “bated breath” in the cause of humanity and justice from a dread lest the spirit of the country will not, or the energies of the country cannot, bear them out in assuming a loftier tone. The Czar has done a similar service to England and to Turkey—he has made both nations show of what metal they are made.

Nor is this all. He has also enabled us to show with how slight an addition to the burdens, and how trifling an interruption to the commerce of the country, a great war against a powerful enemy might be carried on. He has afforded us an opportunity of testing and displaying *all* our resources—both of men, money, and science. Immediately after the declaration of war came the celebrated, judicious, and well-timed Orders in Council, announcing that the old custom of issuing letters of

* Our Baltic fleet alone consisted of 43 ships, 2200 guns, 16,000 horse-power, and 22,000 sailors and marines.

marque would not be resorted to, (while the Americans about the same date declared their condemnation and abandonment of privateering;) that the disputed and irritating right of search would be greatly modified; and that, though most Russian ports would be strictly blockaded, yet Russian produce in neutral vessels on the high seas would be allowed to pass unchallenged; in plain words, that if merchants of other nations could contrive to procure and export Russian produce by some circuitous route, they were at full liberty to do so. The result of this wise liberality has been, not only that we have avoided all those dangerous and fretful quarrels arising out of the clashing of neutral and belligerent rights which so afflicted us in former wars, but that we shall obtain from Russia all the articles we need pretty much as usual, though more slowly and through different channels. Commerce in fact between the two countries will go on nearly as before, with this difference, that the Russians will pay more for what they import, and receive less from what they export, by the extra cost of transit; that their shippers are as idle as their ships, that their customs' revenue will suffer greatly from the stoppage of their regular ports; and that the £7,000,000 of British money which formerly fed and conducted their commerce, has been wholly withdrawn.* We, however, have suffered but little; our merchants frequent Dantzic and Königsberg instead of Riga and St. Petersburg; and we pay somewhat more for a few of our articles of import, and look about in new quarters of the world for means of reducing their price by competition.

Further. For the first time in our recent history, we are supporting war by taxation and not by loan. Owing to Mr. Gladstone's judgment and firmness in holding out against the pressure of the monied interest, we have at length established this great principle. We are carrying on a contest on a gigantic scale, and against a colossal antagonist; we are in the first year of the war—always the most expensive, because it includes the transition from peace to strife—the *oufit*, so to speak, of our forces; we have added enormously both to our military and naval establishments; and yet we have not borrowed a single shilling, or laid on a single tax which impairs the resources of the country, fetters its industry, or is felt as a serious burden by the people.

* See a very valuable paper by Mr. Dapson, read before the Statistical Society of London, and since published separately. From a curious and interesting article in the *Economist* of Sept. 29, it appears that while the exports from Russia are going on as much as usual, her imports (especially of heavy articles, as salt, cotton, sugar) have been considerably checked. The result is an action on the exchanges, which, if it continues, will lead to a considerable export of specie to Russia to redress the balance.

The army and navy estimates (paid out of the ordinary revenue, and arranged before the war broke out, as what was necessary to keep our establishments in an efficient state, but on a peace footing) reached this year, £18,500,000; we already possessed an available surplus of about £1,500,000; and the doubling of the income-tax, the increase of the malt and spirit duties, and the postponement of the project of equalizing the sugar duties, afford £10,000,000 more. There can be no doubt that ten millions per annum in addition to the ordinary cost of our defensive armaments, will be found amply sufficient to meet the current expenses of the war, even if it should continue for many years. In other words, an annual tax, paid out of income, and equal only to an average of *seven shillings per head* on the entire population, is all the sacrifice we are called upon to make, in order to sustain the most extensive and sudden warlike operations ever undertaken by this country. Probably this fact has done more even than the unexampled rapidity with which our vast armaments were completed, to startle the world into a conviction of the wonderful resources and elastic energy of Great Britain. That we, who, in our last war, added no less than *six hundred millions* to our national debt,—or thirty millions a-year, should now be deliberately prepared, and should prove able to carry on hostilities on a stupendous scale, and as long as may be necessary, *out of the regular income of the year*, is a fact which of itself is almost worth a war to bring out into the light of day, and proclaim to our rivals and our foes.

Another signal gain which has resulted from the events of the last year, is the change which has taken place in the relations between Austria and Russia. For more than a generation, the latter power has been the great stay and protector of the Despotical thrones of Europe: while nearly every other country on the continent was torn by internecine struggles—by the determination of the people to obtain those civil rights, and that participation in the government, which it was the determination of the rulers not to grant—Russia alone was safe and undisturbed. The absolutism of the Czar was undisputed; the revolutionary spirit is foreign to the Slavonian character; or, at least, with Slaves it never takes the form of a rising against authority in the name and for the sake of freedom. The Russian monarch could therefore wield at any time the entire resources of his dominions, and his whole sympathies, ideas, and notions of the fitness of things, were so exclusively cast in the mould of despotism, that he was not only willing and anxious to support the prerogatives of all other ~~sovereigns~~ ^{sovereigns}, but was unable to look upon their discontented and illious subjects in any other light than as criminals hostile to ^{the} law and order. His whole weight was therefore thrown into the

scale of despotism; his aid was always ready to put down liberty, and it was rendered with an unscrupulous and conscientious zeal. In the great European movement towards free institutions, which has been the key-note of history since 1815, Russia has always headed the party of absolutism and reaction; her influence has been chiefly felt in, and exerted through Germany; and on no one of the German states was her hold so strong or so peremptory as on Austria. Prussia coquetted with liberalism as she has coquetted with every thing else, in a manner highly displeasing at times to the rigid puritanism of the Great Autocrat; but Austria was undeviatingly faithful to the practice as to the maxims of tyranny. To Russia she could at any time appeal for support; from Russia she might always count on aid in any quarrel with her own subjects. Five years ago, Russia had saved her Empire from dismemberment, and her dynasty from degradation to the rank of a fourth-rate power, if not from absolute destruction; one year ago she was still at the feet of Russia—a vassal, and almost a despised one, bound by the iron fetters, while smarting under the humiliating sense, of a mighty and unrepayable obligation. She had been baptized by the blood of her subjects into the terrible faith of despotism; she had done homage for her crown with every sanguinary solemnity that could ratify a compact; she had as it were sold herself to the Prince of Darkness, and was bound to do his bidding. Against the united armaments of Russia and Austria, the patriotic efforts of the Hungarians and Italians were impotent, and their sacrifices unavailing; their hopes were changed into despair; for it was felt that the close union between the two absolute powers of Europe made it alike impossible for Austria to grant free institutions to her people, or for her people to wrest them from her.

Now, all this is changed. The allies have become foes. Austria has thrown off the yoke and incurred the enmity of Russia, by an ingratitude almost unprecedented in its flagrancy, and a policy as unprecedented for its skill. Not only has she refused to aid her benefactor, not only has she dared to blame and to oppose him, but she has turned against him at the most critical moment, and actively, though not violently, assisted in his humiliation and defeat. She has inflicted an injury and an affront which it is absurd to imagine that Nicholas will ever forgive, or will not seize the earliest occasion to punish. Henceforth Austria and Russia may be allies, if a common peril should unite them, for a time, but they can never trust or love one another again. Partnership there may be—friendship never more.

Austria, it must be confessed, has played her game with a consummate sagacity and firmness which we were far from anti-

icipating. A year ago her position was one of the most imminent and formidable danger: it is now one of commanding strength. In 1853 it seemed almost certain that she must lose a portion of her dominions, if indeed she did not fall to pieces altogether. In 1854 she holds the scales of fortune; the fate of Russia—the extent, that is, to which it may be reduced—is in her hands; and she “occupies” the Danubian Principalities, whose possession she has so long coveted. She has superseded her rival and saviour in the “Protectorate.” And she has done all this without striking a single blow or losing a single man. Twelve months ago the preservation of her neutrality in the impending conflict seemed all but hopeless; yet on the preservation of her neutrality depended her safety, and almost her existence. If she joined Russia, as all her antecedents and her dynastic sympathies led us to expect she would, Lombardy would have risen, with the connivance or assistance of the Western powers, and she would have lost her Italian provinces at once and for ever. If, on the other hand, she had openly and decidedly joined England and France, Hungary would have risen at the instigation and by the aid of Russia, who would have thrown men and munitions of war across the Carpathian passes into Transylvania, and would thus not only have secured a warlike ally in a most critical position, but would have completely paralyzed Austria as an efficient foe. Any way she must be a sufferer. The interests of the Empire urged her to assist in repelling Russian encroachments. The interests of the Court and the dictates of gratitude urged her to connive at these encroachments, and to accept her share of the promised spoil. Whatever decision she adopted it seemed inevitable that she must lose some of her allies and one portion of her dominions. She contrived to avert both dangers by avoiding either decision. She induced the Western Powers to discourage and forbid an Italian insurrection, by saying, “You are in the right in this quarrel; I am with you at heart; and I will back your remonstrances, and support your demands by words if not by arms.” She prevented Russia from taking any hostile step against her in Hungary till it was too late, by saying, “You are in the wrong; you are causing a war which may ruin both of us; but I will make the best terms for you I can; and at all events I will not act against you, if you make it possible for me to avoid it.” She armed with great diligence; she negotiated with unresting activity; she made treaties with Prussia in order to provide against danger in that quarter under any contingency; she joined the Western Powers in urging Russia to be moderate and Turkey to be submissive; she waited and temporized to see what party would be successful; she steadily and avowedly con-

sulted Austrian interests alone; she offered to "occupy" Servia as a neutral; she offered to "occupy" Wallachia as a friend; she made no hostile demonstration against Russia till Russia was too busy and too beaten to be able to do anything in Hungary; but she kept her in such uncertainty as to her intentions that a retreat from Kalafat became strategically desirable. She did not even propose to enter the Principalities till the Russian army had resolved to withdraw; as soon as that army paused in its retreat her army paused in its advance; and it was not till Nicholas had retired behind the Pruth that Francis Joseph took possession of Bucharest. He has gained a great victory and made a great conquest without either having seen his enemy or having declared war against him. Austria has secured Lombardy, retained Hungary, occupied the Principalities,—and yet her last statement was that "no *casus belli* had yet occurred between her and Russia, and that she would wait to see the result of our attempt against Sebastopol." When that stronghold has been taken, and when Nicholas is effectually and irrecoverably beaten, she will then probably take heart of grace to kick the prostrate Bear, and ask for Moldavia and Wallachia as the fee of her signal services.

Her skilful policy,—successful from the very concentrated intensity of its selfishness,—has unquestionably disappointed the hopes of the more sanguine friends of freedom. Austria has passed through a most menacing crisis of her history, and neither Italy nor Hungary is yet emancipated, while their oppressor seems securer and mightier than ever. Still, if we can recover from our disappointment, and look at the matter calmly and deliberately, the gain to the cause of liberty has been considerable, though it be prospective rather than actually realized. The alliance between the two great colossi of Despotism is secured, and one of them has been both enfeebled and unmasked. Russia will come out of this war not only much weakened, but incalculably damaged by the discovery that she has always been much weaker than was supposed. She can no longer domineer over Germany, and frown down freedom, as she has hitherto been permitted to do, by the mere prestige of an untested omnipotence—magnified by the mists of ignorance. The great image is found to have been made of clay, and will not again be dreaded or deferred to as of yore. Not only will Russia be less able to back Austria in her game of stupid and brutal despotism, but she will be incomparably less willing. The Czar is not supposed to be a man of particularly forgiving temper; and the sin of Austria is of that sort which precludes pardon. She has not only deserted Russia: she has thwarted her and out-generalled her;—and she is aware that henceforth

she lives in the presence of an implacable foe who will be ever watching his opportunity with that vigilant and patient hatred against which scarcely any power can be a guarantee. The chief passion of Nicholas in future will probably be the damage and humiliation of Austria. Not only will he not, as in 1849, come to her succour when reduced to extremity by a Magyar rebellion—he will foment such rebellion whenever occasion serves. Already the power which he possesses over the heterogeneous populations of Austria is a most formidable danger to that empire. Out of 35,000,000 of people, it is calculated that only 7,000,000 are Germans, and upwards of 17,000,000 are Slavonians of various race,—the great majority of whom look up to the Czar of Russia as their natural chief, while the Emperor of Austria is only their accidental ruler. They touch their hat before the portrait of the one: they cross themselves before the portrait of the other. Their allegiance is already more than divided; the “*Panславic*” idea is spreading among them; and the agents of Nicholas are ever on the alert to give it consistency and strength. In fact, a very few years of intrigue would suffice to give him nearly as strong a hold over the Slaves of Austria as he has long had over the Greeks of Turkey; and resentment and ambition will now be busily at work to stimulate him to a relentless use of all his opportunities of retaliation. Henceforth, therefore, Austria can no longer lean on Russia while suppressing or mowing down her own subjects: she must restrict her despotic propensities to such a mitigated form as England and France can countenance, or as she can indulge by her own unaided strength. She must abate her iniquity, or she must stand alone in it. She may remain a powerful state, and may, if she please, become mightier than ever; but this can only be by earning and deserving the attachment of her alienated subjects; for she will stand between cold and unsympathizing allies who abhor her barbarities, and an irritated rival ever prompt to take advantage of the disturbances which those barbarities cannot fail to arouse. She remains, as always, the competitor of France: she has lost the love of Russia: she can now only stand by purchasing the love of England or the love of Hungary—and the same coin, and no other, will buy both.

Perhaps, however, the most signal and serviceable change which has been wrought since we last addressed our readers on this subject, lies in the terms on which it was then proposed to terminate the quarrel, and the terms which are demanded now. In January last, the bases of negotiation dictated by the allied Powers—but most happily modified by the Sultan and rejected by the Czar, were as follows:—“1. The evacuation of the Prin-

cialities as promptly as possible;—2. The renewal of the old treaties;—3. The communication of the firmans relative to the spiritual advantages granted by the Porte to all its non-Mussulman subjects—a communication which, when made to the Powers, shall be accompanied by suitable assurances given to each of them.”—How any statesman, imbued with the slightest tincture of justice, or the smallest degree of foreseeing sagacity, could have wished to impose such terms upon an injured sovereign, or could have expected to secure by their acceptance anything beyond a hollow and fallacious peace, we were and are utterly unable to explain. We thought, and still think, the proposal of such terms to have been in every way disreputable. We rejoice that we bore our testimony promptly and earnestly against the iniquitous and futile compromise. We shewed that it demanded everything from injured Turkey, and conceded everything to aggressive Russia; that the ‘evacuation’ thus insisted upon was nothing but what Russia has all along promised the moment her claims were conceded; that the ‘communication of firmans’ was a mere screen, and would leave Russia still the real ‘protector’ of the Greek Christians in Turkey, inasmuch as *she* would always be complaining and remonstrating whenever *they* were punished for disturbance or rebellion, and *we* only when they were ill-treated or persecuted on religious grounds; and that in fact, the stipulation left the unhappy Sultan as much liable to interference as before. We pointed out, moreover, that a ‘renewal of the old treaties’ was a basis of negotiation which only sheer insanity or unscrupulous dishonesty could concede; that *these very treaties* it was which gave Russia the means and the pretext for constantly harassing and undermining the Ottoman authority; which secured to her the command of the Danube navigation which she had so scandalously abused; which excluded our ships from the Bosphorus, and made the Euxine a Russian lake. In January last, at the very time when our diplomatists were proposing the extraordinary arrangements we have just quoted, we declared that the only terms on which anything like a permanent peace, or even a satisfactory compromise, could be adjusted, were,—1. “The entire abrogation of all the treaties which gave Russia a pretext for interfering in the affairs of the Principalities, or of any other part of Turkey;—2. The total cessation of her control over the mouths of the Danube; and 3. The opening of the Black Sea to the navies and the commerce of all nations.” At length, after the lapse of nine months, our ministers and our allies have tardily and painfully arrived at the same conclusion, and the terms now officially stated as the *minima* on which we can consent to treat, are—

“*First*, That the protectorate hitherto exercised by Russia

over the Principalities of Moldavia, Wallachia, and Servia, *shall cease*; and that the privileges granted by the Sultans to those dependencies shall, in virtue of an arrangement with the Sublime Porte, be placed under the collective guarantee of the Powers.

"*Second*, That the navigation of the Danube, as far as to its outfall into the Black Sea, *shall be delivered from all restriction*, and submitted to the principles consecrated by the acts of the Congress of Vienna.

"*Third*, That the treaty of July 13, 1841, shall be revised in concert by the high contracting Powers, in the interest of the European equilibrium, and in the sense of a limitation of Russian power in the Black Sea.

"*Fourth*, That no Power shall claim the right to exercise any official Protectorate over the subjects of the Sublime Porte, to whatever site they may belong; but that France, Austria, Great Britain, Prussia, and Russia, shall lend their mutual co-operation, in order to obtain from the initiative of the Ottoman Government the consecration and observance of the religious privileges of the various Christian communities, and turn the generous intentions manifested by his Majesty the Sultan to the account of their various co-religionists, so that there shall not result therefrom any infringement of the dignity and independence of his Crown."

These surely are achievements sufficient for a campaign of nine months. The most inattentive could scarcely desire more. The most sanguine could scarcely have hoped as much. A close and cordial alliance cemented between France and England; the magnitude, readiness, and availability of the resources of Great Britain, both in wealth and arms, displayed in such a manner as to astonish herself as well as the world at large; the strength of despotism broken by the severance of Austria from Russia; Turkey secured against present peril and future oppression; Russia, the great bugbear of Europe, and the great foe of free development, shorn of her prestige—baffled, beaten back, blockaded and despoiled; deprived in a single year of the conquests of half a century of intrigue and violence; not only thwarted and checked, but humbled and crippled; retreating across the Pruth in place of advancing beyond the Danube; and paying for the massacre of Sinope by the loss of Sebastopol and the Crimea:—Such are the results of the first campaign. The expulsion of the enemy from the Transcaucasian provinces will be the work of next campaign, if Nicholas does not avert further disasters by submitting at once to the terms proposed to him. Thus far we have been treading the domain of fact: we must now step into the region of conjecture.

Supposing all these things done—and it is reasonable to consider the liberation of Georgia, Mingrelia, and Immeritia from the Russians as much a *fait accompli* as the destruction of Bomarsund or the capture of Sebastopol—two questions arise, both of them perplexing ones:—"What are we to do with our conquests?" and, "What will Russia do without them?" The embarrassment of the first we have already felt. At some sacrifice of life, and at considerable cost of preparation, we captured the Aland Islands, and stormed the forts erected there by the Russians to command the Gulf of Bothnia. The question immediately presented itself—"What to do with them, now that we had got them?" They originally belonged to Sweden; they lie close along her shore; they were taken possession of by Russia with a view to protect Finland and to menace Sweden. The obvious course was to give them back to that power on condition of her retaining them as our ally. But Sweden, naturally enough, was not willing to accept so dangerous a gift—a gift which would place her in immediate hostility with a gigantic neighbour, who would be sure to take the first opportunity of punishing her as a receiver of stolen goods—a gift which she could not hope by her own strength to retain against the efforts of a rival who, though defeated and enfeebled, would still be an immense over-match for her. England and France could not retain the islands; for, in the first place, we did not want them: they would have been of no use to us after the war was concluded; and they would have cost a considerable expenditure of men, money, and ships, to garrison and defend them effectually. Moreover, in the second place, the two Western Powers had solemnly bound themselves at the outbreak of the war to make no conquests for their own behoof—to seek and to retain no territorial acquisitions. There was only one other alternative—so the islands were dismantled and abandoned.

A similar difficulty has just again occurred. We have, after a sanguinary conflict, conquered the Crimea and stormed Sebastopol. It was absolutely necessary we should do so. That harbour, impregnable by sea, is assailable enough by land. Whoever possesses the Crimea can always menace and generally seize that harbour. Whoever possesses that harbour is virtually master of the Euxine. It is the only available port of refuge of any size in the whole of that inhospitable sea. But what is to be done with the Crimea on the conclusion of peace? To give it back to Russia would be to undo all that we have done,—to enable her again to make the Euxine a Russian lake, to menace Constantinople, to harass the Circassians, to maintain her fortresses along the north-eastern shore, and to re-inforce her armies south of the Caucasus,—to retain Georgia, or to recover

it. That consummation, therefore, we shall scarcely so far stultify ourselves as to dream of. To dismantle and abandon our conquest, as at Aland, would be equivalent to surrendering it to Russia; for she would, of course, immediately re-occupy it. To allow France to retain it, or to retain it ourselves, or to hold it jointly and permanently, would be equal violations of the "self-denying ordinance" already referred to, and would besides be arrangements fertile in occasions of dissension. To give it to Turkey, trusting to her own unaided forces for retaining it, would, we fear, be only a circuitous mode of restoring it to Russia; for not only will the Russians always be an overmatch for the Turks by sea, but a glance at the map will shew that whoever holds the northern shores of the Euxine has immense advantages both of defending and attacking this peninsula, and in fact is its natural possessor. To guarantee Turkey in the possession of the Crimea would be binding ourselves to interfere and fight for her whenever a quarrel arose, as one soon might, relating to that territory,—and at times probably when such an engagement would be especially inconvenient. One of the most important objects to bear in mind when we enter on negotiations will be, to solve "the Eastern Question" for ever, to put the Ottoman government in such a position as to be able in future to secure its own safety and to do its own work: to make, if possible, no arrangements *which cannot stand on their own legs*. If we were to restore the Crimea to its old owners the Tartars, we should be committing a similar indiscretion, for they are an unenergetic race, and are now so reduced in numbers, that they scarcely exceed the Russian population, and having once lost the peninsula could not be expected to defend it now. If we were to dismantle the fortifications of Sebastopol, and declare that any attempt to rebuild them or to march more than a certain number of troops into the Crimea should be considered as a *casus belli*, we provide for having a *casus belli* constantly hanging over our heads, for Russia to let fall at the most embarrassing moment; and any arrangement which compels us permanently to maintain a fleet and army in the Black-Sea is greatly to be deprecated; yet how, without such forces present on the field of dispute, could we hope to control Russia, whose ships may come down her three great neighbouring rivers, and whose armies may encamp within a week's march of Sebastopol? Whichever way we view it, the matter is embarrassing enough. One thing only is clear—that as the navigation of the Euxine is to be thrown open to all nations, the only harbour which makes that navigation practicable or safe at all seasons must also be accessible to all nations;—and whoever holds it must hold it "under trust," and upon specified conditions.

The case of Transcaucasia has been thus concisely stated : --

"The case of Georgia is attended with somewhat similar difficulties. For many generations the Prince of Georgia or WALLI, as he was called, had been a sort of hereditary Viceroy of Persia—holding, in fact, something of the same relation to the Court of Ispahan that the Prince of Serbia or the sovereign of Egypt now bears to the court of Constantinople. He received his investiture from Persia, and did homage for his crown, and a Persian garrison occupied the citadel of Tiflis. The Georgians were very much harassed by the attacks of the Lezgins and the adjacent mountaineers, and (Persia, after the death of Nadir Shah, being torn by internal dissensions, and unable to aid her vassals,) these, in an evil hour (in 1752,) applied to Russia for assistance. Of course, it was granted with alacrity; and from that time forward Russia pressed with persevering activity her intercourse with these dependencies of her rival. A few years afterwards, in 1783, the existing Viceroy, Heraclius, was persuaded by the Empress to take advantage of the troubles of Persia, and transfer his allegiance to Russia. In return, she engaged to maintain him in his present possessions, *and in any he might hereafter acquire*, and to guarantee the sovereignty of Georgia to him and his heirs for ever. Seventeen years after, in 1800, an ukase was issued, incorporating Georgia with the Russian empire. The deceived and wretched sovereign died of a broken heart. Persia, of course, endeavoured to reconquer her lost territory, but in vain; and it was finally ceded to Russia by the treaty of Gulistan, in 1814. Thus Georgia became a province of the Czar, who obtained what he had so long desired—a firm footing south of the Caucasus, a *pied-a-terre*, whence he could overawe Persia and menace India.

"It is clear that our future peace and the independence of the Caucasian mountaineers depend materially on the expulsion, final and complete, of the Russians from their Transcaucasian possessions. Suppose, then, that expulsion effected, how are those possessions to be disposed of? Few questions are more puzzling. It is evident that our interests require that Persia should be strengthened as much as possible, in order that she may be able to make head effectually against Russian encroachments in future; and may prove a useful outwork and barrier to our Indian empire. If we could make her powerful enough to stand alone, she would be the natural enemy of Russia, and our natural ally. But it is by no means certain that the restoration of Georgia to her crown would thus strengthen her. The Georgians are Christians, and might resist being replaced under Mussulman dominion. They might cherish some recollection of their independence, and might not acquiesce in being transferred from one despot to another. At all events, such an arrangement would leave open all the usual doors to Russian intrigue: she would foment quarrels between the recalcitrant province and its jealous suzerain, and on the occasion of every quarrel would offer either her insidious mediation or her open partisanship; and the old game would be played over again. Or, on the other hand, if we declared Georgia

independent, how is her independence to be maintained? If the mountaineers assailed her, she would call in the aid of Persia or Russia, whichever she could obtain most readily and most cheaply, —and Russia always does this sort of work gratis. If she had any dispute with Persia—*ah!* disputes are of perpetual recurrence between contiguous states—she would be certain to apply to Russia for assistance, in spite of past experience; and feeling that she had so willing an ally at hand, would be especially disposed to bully and to quarrel. In either case, Russia, we know, would give no rest to either party. She would be perpetually intriguing with the court of Teheran and with the tribes of the Caucasus, to make the position of unhappy Georgia quite untenable. Only in a close alliance and a real friendship, and a sense of common interest between the three menaced nations, could peace and security be found: and is this to be hoped for? Parties more intimately acquainted with the character and feelings of this people than we pretend to be, must answer this question. God send our rulers and diplomatists, what we wish to all prisoners at the bar, ‘a good deliverance.’”

But supposing all these points definitively or provisionally settled,—regarding Russia as having lost Transcaucasia, the Principalities, and the Crimea, her Euxine fleet destroyed, and her Baltic fleet blockaded and rotting behind the walls of Cronstadt,—what will be her course? Will she turn rusty and stubborn, refuse all negotiations, retire into her interior, act on the defensive, have recourse to stratagem, and trust to time turning up some favourable hazard? Or will she accept her defeat, sue for peace, and make the best terms she can? We do not think her decision is of very much importance. In either case her prestige is irreparably shaken. No Imperial Gazeteers can conceal the fatal fact of her discomfiture. No falsehoods can much longer deceive even the Asiatic tribes. Her own people know that her ships remain in their harbours, and that their usual supply of salt is cut off, and that their great Czar is powerless to help them. Her nobles know that their peasants are taken from them in unusual numbers and do not return; that they receive less than formerly for their produce, and pay more than formerly for their foreign luxuries. Her merchants know that their commerce is compelled to seek circuitous channels, and to incur heavy additional costs of transit. The Oriental nations will know that Russia is driven beyond the Caucasus, and has been utterly defeated in the Euxine. In a word, the losses of Russia are actual and undisputable, whether acknowledged or not by formal treaty. Perhaps stubborn pride and a lingering hope of better fortune may induce Nicholas to be obstinate and deaf. In that case all we shall need to do will be to maintain, during six months in the year, such a fleet at the entrance of the Gulf of Finland as shall effectually imprison the Russian ships and

blockade the Russian ports, recalling it at the approach of winter, when the ice will do our work. In other words, a certain number of vessels will summer in the Baltic instead of elsewhere. The Russian fleet in the Black Sea captured at Sebastopol, we shall be able to recall all our ships from that quarter, with the exception of a certain number of steamers and transports for the use of our land forces and the seizure of any vessels that may venture down the Dnieper or the Don. The Austrian forces holding the Principalities, Omer Pacha and the greater part of his army would be at liberty to march to the seat of war in Asia, and would only need a small auxiliary force of the allies to enable them to complete and consolidate their work. Thus we might remain for years (if Nicholas held out so long) as comfortable as if we were at peace, and scarcely incurring heavier expenses. It is probable that two millions sterling would then cover the annual cost of the war: matters would go on nearly as usual; and in the meanwhile the Ottoman dominions would be recovering from their energetic and exhausting struggle.

But if Nicholas—seeing no chance of recovering his lost possessions, moved by the distress of his people and the discontent of his nobles, unwilling any longer to submit to a humiliating and impoverishing blockade, and above all, uneasy at the hold over Moldavia and Wallachia which the Austrians might obtain by a prolonged occupation of these provinces, and dreading lest Bessarabia and Odessa might soon be lost also—were to consent to the terms imposed by the Allies;—viz., the cession of the Crimea; the abandonment of all pretensions to a protectorate over any Turkish subjects; the unimpeded navigation of the Danube, the loss of Georgia, and the acknowledgment of Circassian independence;—what then would have been the result of the war to Russia and to Europe? How will the Czar get on without the possessions which it cost him so many years of diplomacy and war to obtain? What will be his probable course of action for the future?

The following is the view taken by the sagacious and well informed Count Krasinski, in the pamphlet which we have placed at the head of our article:—

“What would be the real consequences to Russia of a peace concluded on the terms alluded to above? Would it materially weaken her, or only impose upon her a temporary check which she could easily repair? Would it not be humiliating her without crippling her power, and irritating her national feeling without depriving her of the means of revenge? It cannot be doubted that the loss of the trans-Caucasian provinces, Finland and the Crimea, as well as that of her navy, would produce a check on the progress of Russian dominion in the direction of Turkey and Persia, and to her influence in the

Scandinavian Kingdoms as well as in Germany; but, I think, that, instead of permanently arresting the progress of her conquest and influence, it would produce only a very temporary suspension of both; because, I am convinced, that, by a proper attention to her internal administration, she may easily repair her losses, and taught by severe experience, gain in many respects a real strength, where she now has only the appearance of it.

"It is well known that the efforts which Russia has been making for more than half a century to establish her dominion beyond the Caucasus, have been attended by an immense sacrifice of men and money; and it is an admitted fact, that the war which she has been prosecuting for many years against the Caucasian Mountaineers, has cost her annually, in round numbers, twenty thousand men, and twenty millions of roubles. It is also well known, that her efforts to create a formidable navy have been the cause of an immense, but useless expenditure, which might have been employed with great advantage for the promotion of various branches of national wealth and power, which are now neglected for want of the necessary funds. The advantages which Russia might have derived, for the furtherance of her schemes, from the possession of the trans-Caucasian provinces, as well as from that of a large naval force, were only prospective, whilst the drain which they created on her exchequer was an actual injury, arresting the progress of the vast but undeveloped resources of that country.

"The great mistake which Russia committed in the pursuit of her schemes of aggrandizement,—that which, as present events seem to prove, has rendered her power more apparent than real,—is, I believe, that instead of preparing for her external increase by the development of her internal resources, she commenced by the former instead of the latter;—or, to use a homely expression, she began at the wrong end. Hence the weakness of her position in many conquered provinces, the inefficiency of her naval armaments, and the wretched state of her internal administration. These premature external developments of Russia, may be not inaptly compared to the parasite offshoots of a tree, which, absorbing its sap, prevent the trunk from acquiring a vigorous growth, and are usually on this account lopped off by the gardener. The truth of this has probably flashed more than once on the minds of the monarchs and statesmen of Russia; but they were too deeply committed in the pursuit of this line of policy to have the moral courage, or perhaps even the possibility, to retrace their steps by voluntarily abandoning the schemes which they had been so diligently prosecuting, but which under a shew of strength, were often a source of real weakness to the empire. This service, which Russia would probably never have obtained from her own government, will have been rendered to her by an external storm, if it be allowed to pass, after having bruised the extremities of the giant, without impairing his real strength;—and this will be precisely the case if Russia permitted to obtain peace on the conditions which I have mentioned above."—*Russia and Europe*, p. 8.

The Count's idea—which is an interesting and a shrewd one—is this;—That the losses and humiliations incurred in this war will have the effect of shewing Russia that Europe is *as yet* too strong for her, and will turn the energies of her rulers from wasteful projects of territorial aggrandizement and political supremacy into the more fruitful channels of internal improvement;—that they will give us a respite from their incessant encroachments and intrigues;—that they will perceive that before Russia can be overpowering abroad she must be strong and civilized at home;—that the millions which have hitherto been so unprofitably spent in fleets, and arsenals, and Circassian wars, and a vast army of intriguing and subsidising agents in every part of the world, will henceforth be directed to develop her vast internal resources, to open mines, to work forests, to cut canals, to cover the country with a net of railroads, (which she from a combination of circumstances can do more cheaply than any other nation,—it is calculated at a cost of about seventy millions sterling);—that these means of communication will not only multiply her commercial and industrial resources a hundred-fold by making all her produce *exportable*, *i.e.* accessible to the markets of the world, but will render her military resources incalculably more available, and inasmuch as troops can be conveyed in a week by railroad over distances which would require three months to traverse by march; that she will occupy herself energetically and effectually in reforming those fatal abuses in her domestic administration, which are the cancer that now eats into her strength, and almost incapacitates her, as we have seen, for successful action;—and that by these causes, she will in time become immeasurably more powerful than at present; and that Europe will have *postponed* the danger which has long threatened her from Muscovite ambition, only to render it tenfold more irresistible at some distant day.

There is some soundness and much ingenuity in this argument; but it may be met by a few equally indisputable considerations. In the first place, the moment Russia becomes civilized,—which she cannot fail to do as soon as her bureaucracy is honest, faithful, enlightened and effective, as soon as industry is safe, and commerce is respected, as soon as roads, railroads, and canals have connected all parts of her dominions together by the tie of cheap and rapid intercommunication—half her dangerous qualities will be gone. Her power may be greater than ever, but her ambition will have become far less formidable. For, be it remembered, it is her *barbarism* that we dread, far more than her rivalry or hostile enterprise. One of the great motives to this war was a conviction very widely spread, that civilisation was in danger from Muscovite aggran-

dizement. Against mere territorial encroachment we should not have armed with half the alacrity we have displayed.—In the second place, the internal resources of a country cannot be efficaciously developed without commerce and the commercial spirit assuming its proper rank and exercising its legitimate influence. By the time the agricultural produce of the country had been everywhere called forth, and its mineral wealth discovered and worked, and the profitable exchanges with foreign countries had brought affluence into every district, not only would the entire population have become accustomed to a state of comfort which war would seriously interrupt and interfere with, but the merchants would have become a numerous and influential body, and a large and powerful middle class would have sprung up. In this way the greatest possible securities would have been given to Europe for the preservation of peace; for all classes would find themselves already, and by pacific means, in the enjoyment of luxuries which no extension of the Russian territory could increase, but which the attempt to extend it would jeopardize;—they would already lay every land under contribution to furnish their demands, by the mighty grasp of commerce:—what more could the feebler hand of military violence do for them? In the third place, while Russia was thus enriching and strengthening herself, would contiguous nations—delivered from the curse of her perpetual intrigues—have been idle? Would not the Ottoman Porte have proceeded so rapidly in the same wise career, that it need no longer dread Muscovite assaults, and have so improved the government of its subjects, that they would no longer desire Muscovite protection? And would not Germany, freed from the incubus of Russian influence, have developed and consolidated her peculiar national civilisation? Would not her monarchs, no longer fortified in their unjust and grinding despotism by the simulacrum of an irresistible autocrat behind them, be compelled to govern righteously, and to submit to the inevitable blessing of constitutional reforms? And would not her people, no longer kept back in their progress either by the leaden hand of trembling and stupid tyrants, or by exhausting and ineffectual struggles to conquer freedom and justice, spring forward in the career of moral and material improvement with an *elan* which will have placed them far beyond the reach of danger from Russian aggression, long ere Russia shall be ready to resume her aggressive policy? Before the century or half century needed for that regeneration of the Russian Empire which the Count contemplates shall have elapsed, the resisting ~~war~~ will have been so incalculably increased on the one side, the encroaching impulse so vastly diminished on the other,

that what is now a formidable danger will have become scarcely more than a chimera.

Such are our views and hopes on this important problem of the future; but we must not pass over two considerations of great weight which bear upon the question. The character of the Russians, and indeed of the whole Slavonian race, is peculiar, and well deserving of the closest study from all philosophical politicians. The Russian has not those aspirations for individual liberty which distinguish the Teutonic tribes and all those who spring from them or inherit any considerable portion of their blood. He cares nothing for self government, or civil rights, or liberal institutions. In all these respects he is an Oriental. He knows he is a slave; but for the most part he is content to be so. He is and wishes to be the slave of a great master. He places his glory not in his own individual grandeur, but in that of the mighty monarch whom he serves. He places his ambition not in stepping over the heads of his own countrymen, but in seeing his country domineer over all other nations. He indemnifies himself for his degrading servitude at home by unparalleled insolence abroad. The poorest and most oppressed, boor, says Count Krasinski, exults in the idea that his Czar is dreaded by the whole world, and identifies himself with the glory of his autocrat. Thus the aspiring, restless movement temper which ferments into revolutionary action in the western nations, expends itself in Russia on foreign aggression, and seeks at once its solace and its vent in dreams of universal conquest.

"An immense, boundless ambition, (says the Marquis de Custine,) one of those ambitions that can only animate the soul of the oppressed, and derive its aliment from the misfortunes of a whole nation, ferments in the hearts of the Russian people. This nation, essentially a conquering one, greedy through its privations, expiates beforehand, by a degrading submission at home, the hope which it entertains one day to tyrannize over other nations. The glory and the riches which the Russians expect, make them forget their present state of ignominy; and in order to cleanse himself of the effects of an impious sacrifice of every kind of public and personal liberty, the kneeling slave dreams about the dominion of the world.

"It is not the man who is worshipped in the person of the Emperor Nicholas: it is the ambitious master of a nation still more ambitious than himself. The passions of the Russians are moulded on the pattern of those of the ancient nations; everything among them reminds us of the Old Testament; their hopes and their sufferings are as great as their empire. There is no limit to anything in Russia—neither to sufferings nor rewards—neither to sacrifices nor hopes. The power of the

Russians may become enormous; but they will have purchased it at the price which the nations of Asia pay for the fixity of their governments—at the price of happiness.”

These two peculiar features of the Slavonic race—abnegation of self-will at the feet of a despot, and insatiable desire of a national dominion over other countries, are common to nearly all Russians, the most enlightened as well as the most ignorant; those who have travelled most widely, as well as those who have never stirred from their own village. There is yet another fact to be faced, which in its possible consequences is full of significance. The Slavonic nations now number nearly 80,000,000* of the European population: the Germans or semi-Germans, reach about 50,000,000.† The Slavonians inhabit, for the most part, scantily peopled districts, and increase fast, having no check but the positive one to keep down their rate of multiplication: The Germans, on the contrary, dwell chiefly in densely populated countries,* and increase at a very slow rate. The Slavonians, again, are attached to their race and their land with singular tenacity; nostalgia is strong among them, and they rarely leave home for long if they can avoid it: the Germans, on the other hand, migrate largely to the New World, —at the rate, actually, of upwards of 100,000 per annum. The Slavonian population of Europe, therefore, bears every year a larger and larger ratio to the German element, and will ere long overbear it altogether.

The strange and startling feebleness which Russia has displayed in this war is attributable to three causes, *first*, the mistaken policy which has led her to suppress and absorb instead of conciliating her subject border populations; *second*, the absence of roads and other means of rapid transport for troops and military stores; and *third*, and most important of all, the wretched condition of her civil and warlike administration—its inherent viciousness, its universal corruption, and its consequent astounding inefficiency. When all these defects shall have been remedied; when half a century of undiverted attention to internal reforms shall have given her a bureaucratic

* In 1842, according to the best authorities, the number of Slavonians were as follows:—

Under Russia,.....	53,502,000
„ Austria,.....	16,791,000
„ Turkey,.....	6,100,000
„ Prussia,.....	2,108,000
„ Republic of Cracow,.....	130,000
„ Saxony,	60,000

78,691,000

† See Keith's Ethnographical Atlas.

system as masterly as that of France, and a net-work of railways like that of America; and when experience shall have taught her that it is better to make friends of those she conquers rather than endeavour to transmute them or to extirpate them,—Russia will present to us, unquestionably, one of the most formidable objects the world has ever seen,—all the resources of civilisation wielded by all the concentrated might of despotism; disseminated wealth, applied science, skilful and systematized administration, such as generally belongs only to countries where freedom has long favoured development and stimulated energy; and a vast population, instinct with the passion for conquest and dominion, and as obedient as one man to the will of a worshipped chief. For we cannot hope that either opulence or commerce, or the peace which is to foster both, will eradicate, though they may modify, the inherent characteristics of the race; we do not expect that the aspirations of Slavonians will ever abandon the aggressive to assume the revolutionary form; and we know that the most sedulous attention of the Russian Emperors will be directed to procure an external vent for what must otherwise perilously ferment within. In all probability the conflict between elements so radically different and irreconcilable as the Teutonic and the Slavonic must one day come; but, if postponed, it will not be, as now, a conflict between civilisation and barbarism, but between two forms and phases of civilisation—between the ideas of the East and of the West—between the government of free institutions and the government of arbitrary power;—and we cannot be so unfaithful to our creed as to entertain any deep anxiety as to the result.

The danger and fatal result of this struggle can, in the opinion of Count Krasinski, be averted in only one way—viz., by the restoration of Poland to a distinct and independent nationality. This is, he believes, the only barrier for Europe against the deluge of Panslavism. “The idea of Panslavism (he observes) is entertained by many Slavonians out of the Russian empire, who, having despaired of ever obtaining from their Governments the recognition of the full rights of their nationality, are becoming every day more and more inclined to merge their national individuality in the unity of their race, and to seek compensation for such a sacrifice in the dazzling, though perhaps delusive, prospects of a Panslavonic Empire.” There is much truth in this representation. Austria has long been endeavouring to Germanize her Slavonian populations, but wholly in vain. She has only succeeded in irritating them against her, and in binding them more closely to one another. In despair of obtaining even the tacit recognition of their nationality from her, they are more and more disposed to look to the Czar as the chief and representative of their race, and to anticipate the time when they will be ga-

thered under his rule. Prussia has pursued the same bad policy as Austria: her efforts to suppress or supersede all Polish feelings and rights, by the introduction of the German element, have been unceasing and unscrupulous. Hitherto Russia has followed a similar course, and with similar ill-success. The Poles are still passionately attached to, and desirous of recovering their separate nationality, but they are beginning to despair of it; and if the present opportunity is suffered to pass by unemployed, they will despair altogether. They hate the Russians, but they hate the Germans still more. The one is an antipathy of government, so to speak; the other is the deeper and more incurable antipathy of race. The Poles as well as the Russians are Slavonians. If denied a separate existence, they will throw themselves into the arms of their kindred. If they may not be great they will at least be powerful. If finally compelled to abandon the hope of being a distinct people, they will exchange it for the cognate ambition of being a formidable portion of a mighty empire. If not re-constituted, so as to be the bulwark of Germany against Russia, they will become the vanguard of Russia in her crusade against the West. They will forget that they are Poles, and remember only that they are Slaves. They will bury their old national pride, and raise it from the dead in a new form. The choice they now offer to Europe is, "Will you have re-constituted Poland on your side, and your eternal bulwark and safeguard, or will you have Poland, merged with the Muscovite empire, your future foe?"

This is the view of a Pole certainly; but we are by no means sure that it is not a correct one. There can be no doubt that despair of realizing one dream is beginning to give place, in the minds of a considerable number of Poles, to the hope of realizing another, less pure, but more gorgeous and less chimerical. There can be no doubt that the ambition of the Czars has for some time been secretly directed towards collecting and consolidating the whole scattered tribes of Slavonic origin into one mass, and proclaiming themselves its chiefs. They have long carried on intrigues having this aim in view, in Serbia, in Montenegro, and in Croatia. They did not lose sight of it when they entered Hungary in 1849. The Poles have always been their great difficulty; but it is certain that they would now gladly purchase the real union of the Poles in their Pan-Slavic schemes by much concession.* Indeed, the instant the Poles as a nation entered

* See *Pan-Slavism and Germanism*, by Count Valerian Krassinski, chap. iii. The following is a quotation from a Polish work published in 1846:—

"Now, if all of us who remain under the Russian, as well as under the German Government, shall abjure the Russian antipathies which have hitherto animated us, and joining in a cordial and conscientious manner the elevated political tendencies of Russia, supporting this new destiny of ours with all that zeal and

into these schemes, and merged their exclusive objects in the grand imperial designs, the whole motive and design for oppression in Poland would be gone. The moment the Poles abandoned their national hopes, they would become a favoured race. Their warlike habits and temper would make them invaluable agents and subjects of a Panslavic empire. The severed portions of Poland, now under the Austrian and Prussian yoke, would not be slow to join their brethren, and therefore Eastern Germany would lead a most perilous and unquiet life.

We fully feel, therefore, that the interests of Germany, (and indeed of Europe,) as against Russia, make it most desirable either to re-create an independent Poland, or at least to keep alive in the minds of the Poles the hope of such a consummation. If we did not know how instinctive and powerful in the breast of nations is the desire of a separate and substantive existence, we confess we should wonder that that harassed and unfortunate people should not long since have abandoned their designs, and almost their desires: and that they should not prefer an amalgamation which would terminate their chief sufferings to a reconstitution which would make their country the perpetual battle-field between two irreconcilable enemies, and condemn them to a life of ceaseless vigilance, turmoil, and confusion. The more important their independence for the sake of Europe, the more dearly purchased must it be to themselves. Fancy the position of a border race, compelled to live sword in hand, a victim to the jealousies, and ravaged by the incursions, of two qu irrelsome and powerful neighbours! It would be the martyr of European liberties.

But however beneficial might be the reconstruction of Poland

perseverance with which we have hitherto opposed Russia, then it must follow, as a matter of course, that the national spirit which has hitherto been weakened on account of its being exclusively Russian, will grow into a powerful Slavonic spirit, and be able to meet, in all the fulness of its strength, the wiles and intrigues of an opposite foreign policy. *The best sup of Russia will become available to her opposite body, only when her great and painful wound shall be healed; she will cease to barbarize herself by the severities which she is employing against us, she will rapidly advance internally in the career of national civilisation, and the progress of a truly Slavonic civilisation will never be hostile to the cognate Polishism, still less be able to absorb it. The action of the Russo-Slavonic spirit will penetrate without impediment into the borders of envious Germany, and may easily embrace the cognate Slavonic nations. Thus, perhaps, a not very remote futurity may show the possible existence of several confederated Slavonic States, among which the Polish would, in conjunction with others, attain, under the leadership of Russia, that national self-standing position which is due to it, much sooner than by the hitherto followed way of German sympathies.*—Surely this is a most significant intimation.

A German writer (M. Wutke) says also,—"What security have we that the animosity which now exists between the Russians and the Poles will not be some day spent, and that the force of the Panslavistic idea will not bring together those two cognate nations, to unite on the basis of a mutual Slavonism, and to press upon us with their joint power? In fact, there are already some Poles of consequence who are labouring to bring about a reconciliation with Russianism."

into an independent State, to every nation but itself, there is one serious difficulty in the way. It may be, and probably is, necessary to the security and emancipation of Germany; but how if that emancipation be not desired? Unhappily there is too much reason to fear lest this should be the case through a large portion of that anomalous and feeble confederation. The power and influence of Russia, beyond all question, constitute the danger most menacing to German interests and German independence; it is their civilisation which is most immediately imperilled; it is they who will be first devoured; it is through them that the blow at Western Europe will be struck. Yet at least four-fifths of the States which compose the Germanic Confederation look to Russia as their protector and ally, and would regard her discomfiture and humiliation as the most serious mischief which could befall themselves. Herein we see the peril and the curse of that system of government which, throughout central Europe, has effected so complete a separation between the people and the Courts, - which has made their sympathies, their interests, their ideas, their aims, not only different but antagonistic and irreconcilable. The German people hate the Russians, and shrink from them with an instinctive antipathy which partakes at once of loathing and of dread. They despise them as illiterate and barbarous; they abhor their submissive slavery; they sicken at their filthy customs and their squalid habitations; but at the same time they shrink with something like fear from the prospect of a collision between their rude and hardy energies, and their own somewhat indolent and effeminate cultivation. They feel towards them as the later Greeks felt towards the Romans, or as the later Romans felt towards the Goths and Vandals. They hate them, too, as the incarnation of the despotic principle, as the *Sbirri* and Janissaries of arbitrary power. The petty sovereigns (ay, and the great monarchs too) of Germany on the other hand, love and cherish them on this very account. It is to Russian aid, rendered or promised, that they owe their thrones; it is from Russian advice they have long drawn their inspiration; it is from Russian countenance that they draw the audacity with which they refuse the demands and trample on the rights of their subjects; it is the consciousness of a mighty power always in the back-ground and ready at any moment to be summoned to their aid, that emboldens and enables them to venture on a course of action which, but for that omnipotent Protector would long since have cost them their crowns. Hence they are inevitably and almost to a man the vassals and the slaves of the Czar, and do him faithful homage and servile obeisance for their fiefs. Hence, while to the German nations Russia is a swelling spectre, a dark menace, an oppressive cloud, - to the German dynasties she is a friend, a patron,

a defender. It is the interest of the people that she should be crippled and disarmed: it is the interest of the sovereigns that she should remain powerful and paramount. And unfortunately, as long as they continue on the throne, the sovereigns wield the resources of the state. Austria has only just now, timidly, tentatively, and tardily shaken off the Muscovite yoke. Prussia still bends under it with complacent infamy. To Nicholas, Frederick William owes it that he is still able to restrict his energetic and cultivated people to the mere shadow and mockery of parliamentary government:—what is it to him that Russia projects like a wedge into his dominions, and has pushed her frontier to within a few marches of his capital? She is all the nearer at hand to protect him against his rebellious subjects. She over-shadows and menaces his country,—but she backs his perfidy, supplements his imbecility, and defends his crown. Where would he be with an independent Poland interposed between him and his protector? He must sink into a constitutional monarch, or abdicate into private life. And what would become of the minor sovereigns of Germany, who play at royalty, and commit all its enormities while incompetent to all its duties,—whose rule is oppressive in exact proportion as their territory is insignificant and their power unreal? How long could they retain their petty principalities and their dishonoured sceptres when severed from their mighty suzerain by a new nation with whom they felt no sympathy, and from whom they could hope for no assistance? The restoration of Poland, therefore, which is a necessity for the German People, would be the death-knell of many of the German Courts.

There is no doubt, however, that the present crisis offers to the great powers an opportunity of reconstructing the map of Europe, such as has not occurred since 1815, and such as, if now passed by unimproved, may never occur again. No one believes that the present dynastic and territorial arrangements can be permanent. They violate too many sacred principles. They trample on too many ineradicable sentiments. They set at naught too many sound considerations both of strategy and policy. A few changes—not extensive, perhaps, but on the other hand not trifling—might at once remove all the constant causes and pretexts of war, and effect a settlement, which if not absolutely permanent, would need only gradual and peaceful modifications. We do not pretend to take upon ourselves the task of statesmen—one requiring emphatically all the sagacity, all the experience, all the varied and minute knowledge which statesmen can bring to it, combined with a regard for justice and high principle which statesmen rarely bring to bear on any question,—though we fear that statesmen will in this case

shrink from their peculiar and especial functions:—All we can do is to intimate a few of the broad features which should characterize the NEW MAP OF EUROPE.

First will come the re-establishment of Poland. If done at all, this work must not be done by halves. There must be no disregard of the ties of history and consanguinity. There must be no parcelling out and subdivision of nationality;—no inclusion of some portions and exclusion of others, which will leave a rankling bitterness behind, and become a fruitful source of irritation and of failure. (Dantzic, and one or two other places, already Germanized, may perhaps be an exception.) For this purpose the three great spoliators of former days will have to disgorge as follows:—

	Square Miles	Population
RUSSIA,--Kingdom of Poland,	2319	4,857,250
Do. Incorporated Provinces, &c.	5782	8,504,800
AUSTRIA,	1594	4,910,629
PRUSSIA,	1007	2,383,504
	10,702	20,656,183

A State would thus be formed large enough and strong enough to maintain its own independence, capable of vast internal development, because the greatest grain-producing country in Europe, and constituting an effective bulwark both for Germany and Turkey against future Muscovite ambition. Prussia might be indemnified for her cession by the incorporation of Saxony, of which she already holds a portion, (and perhaps also of some of the smaller and more mischievous principalities which are contiguous to her frontier,) while the King of Saxony would exchange his present kingdom for the new one, whose capital should be Warsaw. Austria would obtain more than an equivalent for all that she surrendered if she were permitted to retain Moldavia, Wallachia, and a part of Bessarabia, so as to give her the entire command over her own great river. Turkey, on the whole, would be a gainer rather than a loser by this re-arrangement; for all that she would lose would be the trifling tribute which she now draws from the Principalities,—only £26,800 a-year, which might easily be made good to her; and she would gain in having Austria instead of Russia as her conterminous neighbour,—a far less formidable one, because possessing no splendid harbour in the Black Sea, and united by no ties of “co-religion” with her Greek subjects. Turkey, moreover, would be far more than indemnified if put and guaranteed in possession of the Crimea.

Italy comes next. If there be one political fact more certain than another, it is, that there can be no peace for Europe, no

progress for Italy, so long as either Austrian dominion or Austrian influence remains in any portion of that Peninsula. The detestation of the "Tedesco" is not a curable malady. It is an antipathy of race. It is felt in every municipality. It beats as vehemently in the bosom of the most moderate Italian patriot as in that of the most fanatical republican. Mazzini and Manin on this subject use no stronger language than Farini and Azeglio. Foreign domination may be maintained there, but it must be maintained by the bayonet. It will be a military, "occupation," not an established rule. As long as a single Austrian or semi-Austrian soldier remains there, rebellion and conspiracy will be chronic. No mitigation of despotism, no introduction of free institutions, (even were such possible,) will make any difference in this feeling or this fact. What is wanted, what is desired, is not liberty for the Italians, but independence for Italy. Austria must therefore resign Lombardy, and with her retirement thence will end her control over the other Italian States, and her power to sustain the arbitrary and brutal tyranny of the Italian thrones. Italy must again become a country, and a free country, in some form or other—in what form we will not now discuss. The consideration would lead us into details for which we have at present neither space nor time; but if once the Austrians were removed from the Peninsula, never to return, a solution of the problem would, we believe, be neither difficult nor long.

Two nationalities thus vindicated and restored, there still remains a third,—at least as worthy of our sympathy. The map of Europe would be blotted, and the peace of Europe insecure, without the resurrection of Hungary. Let us refer back a page or two. We there proposed to compensate Austria for what she was called upon to resign in Italy and Poland, by giving her the Danubian Principalities. This sort of disposal and allotment of territories, will, no doubt, strike our readers as painfully like those arbitrary arrangements at the congress of Vienna, which have been so severely and so justly reprehended. And assuredly it would be both the practical difficulty and the moral objection to the proposed arrangement, that England could not conscientiously be instrumental in placing any new countries under the dominion of a power so tyrannical, so faithless, so anti-progressive as Austria has shewn herself to be—especially countries possessed of established right, and something like a popular constitution. The whole empire of Francis Joseph is made up of incorporated territories once free and independent, whose municipal and peculiar privileges his ancestors swore to respect, and yet systematically, laboriously, and invariably undermined and overthrew. The inherent idea of the heterogeneous ingredients of the Austrian empire, was that of separate constitutions and

guaranteed civil rights: the inherent idea of the court of Vienna has always been that of a centralized and uniform despotism. Would it not, in spite of any promise and any security, treat Moldavia and Wallachia as it has treated Bohemia, Moravia, and Hungary? And if so, should we not, by assigning them to her, have made ourselves sharers in a great crime, and responsible for a terrible abuse of the power bestowed by a successful war?

Unquestionably Austria would wish to pursue her old policy towards her new acquisitions. Undoubtedly she would desire to incorporate and assimilate them into her narrow and relentless system. As unquestionably we think she would be compelled not only to abandon the attempt, but also to revise her behaviour towards all the rest of her dominions. For what would be her position under the contingency we are contemplating, and when the new arrangements are completed? She would be surrounded by, and would consist of, justly discontented and semi-hostile nationalities. Strong in Austria proper and in the Tyrol, she would be weak everywhere else. The despotic and centralizing system of government which she has hitherto maintained with difficulty, and only by the powerful aid of Prussia, she would now have to maintain by her own unaided strength, and against the bitter hostility and the perpetual intrigues of Russia;—or she must abandon it altogether. Prussia, also deprived of Russian assistance, will have become liberal perforce, and the other German States must have followed the unavoidable example. England and France cannot countenance a system which can only be upheld by constant violence and habitual atrocity. Physical power, too, will be gone. More than three-fourths of the dominions of Austria will then consist of Magyars and Slavonians;—the former furiously hostile, the latter perpetually coquetting with their Muscovite cousin,—already divided in their allegiance, and ready on provocation to throw it off altogether. The Austrian Court would have to maintain a ceaseless rivalry with the Czar of Russia in the affections of her own subjects. Only by treating them with justice and respect, by respecting their national feelings, by maintaining their constitutional rights, by a faithful adherence to her engagements, could she retain her hold over them, and counteract Russian intrigues by practically outbidding Russian promises. She would thus find herself, on peril of her life, compelled to enter on an entirely new line of policy, and become as just and liberal as she has hitherto been perfidious and oppressive; and of this enforced metamorphosis the constitutional independence of Hungary must be the first fruits. The Magyars cannot then be defied, but must be at once conciliated and conceded to. Their old ancestral rights will be restored to them, under the guarantee not of oaths but of circumstances;

and while Hungary regains what she has lost, *a fortiori* will Wallachia and Moldavia retain what they now possess.

By such a remodelling of the map of Europe, therefore, as we have here briefly sketched out, a new era of hope, peace, and promise would be inaugurated. That perpetual distrust, or fear of disturbance, which has arisen from the struggles or conspiracies of the oppressed nationalities of Poland, Italy, and Hungary, would be for ever ended. Germany would be liberalized. Italy would become a progressive, flourishing, and powerful state. Austria, no longer an unteachable despot, embroiling the affairs and interfering with the improvement of Western Europe, would keep the peace between Russia and Turkey, and allow the vast resources of the basin of the Danube, from Pesth to Galatz, to develop themselves unchecked. The Ottoman Porte would have purchased real security by a nominal sacrifice of territory. Europe would be for generations, if not for centuries and for ever, liberated from the dangers of a semi-oriental barbarism; the commerce of the East might be opened up for the general benefit of the merchants and producers of the West; and England and France, differing in the forms but yet harmonious in the tendencies of their civilisation, might go to rest in each other's arms.

That the statesmen of Europe should be comprehensive enough in their views or bold enough in their action to undertake such a re-settlement as we have hinted at, we can scarcely entertain a hope. With rare exceptions they are men rather of art than of science—more absorbed in daily labour than open to secular conceptions. They act, too, under such a heavy sense of responsibility as forbids them to be either provident or daring. For unfortunately, though sensitively alive to the danger of doing too much, they are often utterly dead to the danger of doing too little. As long as they keep in the beaten tracks of diplomacy and act on old political traditions, they regard themselves as “safe men,” and give themselves easy absolution if they fail. Whereas, if they were to strike out a new course, to look to a not immediate future, to rise to the height of a great principle and a commanding view, they would feel as if they had incurred a risk almost reaching to actual guilt, and for which only the most signal success could procure them an act of indemnity. They prefer the *probability* of being wrong in adhering to the maxims of their predecessors to the *chance* of going wrong by departing from them. So we do not anticipate that they will do more on the present occasion than stop up a few gaps, ward off a few dangers, and patch up a few rents. It is probable that they will drive Russia beyond the Pruth, the

Caucasus, and the isthmus of Perekop, and, if she then sues for peace, will leave her in undisturbed possession of all her other acquisitions. If this be the case, we may have rescued *Turkey* from her grasp, but we shall have gained only a temporary respite for *Europe*. The shadow of Russia will still rest upon Germany; her subtle and sagacious diplomacy will be at work as busily as ever; her influence over the despotic princes of central Europe will be unbroken, for she will still be their chief hope and their sole kin; she will continue her action on the world and her hostility to freedom still, but it will be through Prussia and not through Austria as before. Against Austria her intrigues will be incessant and relentless; she will keep up perpetual fermentation in all her Slavonic provinces, and lead her a most unquiet life. It is to be hoped she may throw her into the arms of the liberal party, as her best hope of safety. Certain it is that all her energies and all her stratagems will be directed to weaken Austria, as henceforth her most direct and contiguous foe. The perilous fact will remain, that Russia is still the great bulwark and embodiment of Despotism, *and that the power of Russia, though checked and humbled, is yet unbroken.* So long, indeed, as England and France continue united, the Czar is powerless to resist them; the freedom and civilisation of the West are safe, and they may give the law to Europe and impress their tone upon her. If unhappily England and France should ever be severed or at enmity, then Russia will resume her sway; the counterpoise to her action will be lost; and she, and not we, may dictate the future of the world. We cannot tell what fresh combinations or separations years or circumstances may bring forth. It is possible that a state of things may recur in which, for a long period, we and our next neighbours may have our hands so full either of disputes or internal disturbances as to be unable to watch Russia with the necessary vigilance, or to curb her with the requisite peremptory vigour. She may profit by the interval to consolidate her sway over Germany, to extend her control over Sweden and Denmark, and to prosecute her intrigues for the dismemberment of Austria; and when we again awake to the necessity and the capacity for action we may find much to undo, instead of a little to prevent. In the name, therefore, of future peace, in the name of future progress, we would most eagerly and pertinaciously urge upon the Statesmen of Europe to use the rare and brilliant opportunity which is now afforded them of establishing the territorial arrangements of the Continent on a footing which may be able to withstand alike the storms of revolution and the hurricane of war—a footing hopeful in duration and fertile in promise of good, because based upon reverence for human feelings and respect for human rights.

